

**CHILD ABUSE BY FAMILY CAREGIVERS AND PHYSICAL,
PSYCHOLOGICAL, AND BEHAVIORAL HEALTH
CONSEQUENCES AMONG 7th – 9th GRADERS**

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OF THE REQUIREMENTS FOR
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MAJOR IN PUBLIC HEALTH NURSING
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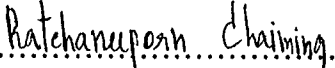
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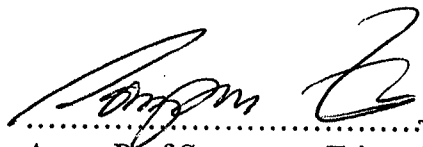
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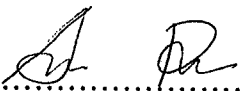
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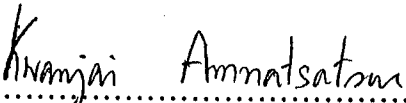
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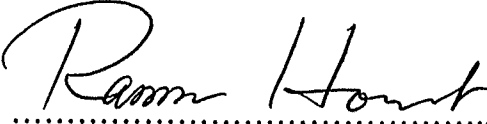
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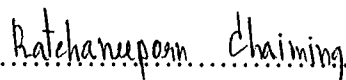

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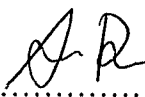
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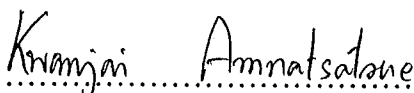
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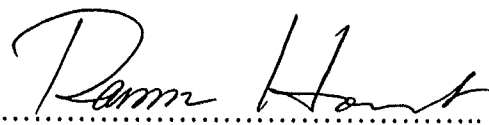

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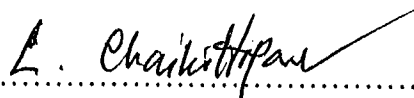

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THESIS ADVISOR : SOMPORN TRIAMCHAISRI, Ph.D.,
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KWANJAI AMNATSATSUE, Ph.D.(NURSING)**ABSTRACT**

This descriptive research aimed to determine the prevalence of child abuse and related factors concerning family caregivers, family, children, and elaborate the health consequences in children. The sample consisted of 350 students studying in 7th-9th grade in Bangkok Metropolis. They were selected by multistage random sampling method. Data were collected from 14th to 28th September 2002. The instrument in this study was a questionnaire which included characteristics of children and family caregivers; family type; family relationship; family crisis; child physical, emotional, and neglected abuse; and the physical, psychological, and behavioral health consequences in abused children. The data analysis was performed by using frequency, percentage, mean, standard deviation, Pearson's Product Moment Correlation Coefficient, t-test, and One-way ANOVA.

Results revealed that 88.0 percent of the children were abused by their family caregivers. The most common form of physical abuse by family caregivers was spanking with the bare hand/hitting with a fist. The most common form of emotional abuse was scolding with rude language, and of neglect was inattention to provide necessary food, or lack of appropriate supervision. In physical consequence, the most common form of injury/physical complaints in abused children was minor injury and no lesion. Regarding psychological consequences, the most reported emotional complaint was sadness, and the lowest mean score item in child self-esteem was unpopular in class ($X = 2.88$, $S.D. = 1.01$). Regarding behavioral consequences, the highest mean score item of child aggression was reflection in the same manner ($X = 1.21$, $S.D. = 0.94$). 34.7 percent of abused children drank alcohol and 19.5 percent of them experienced substance use. Among child abuses, there were significant differences in factors of family caregivers, including gender, occupation, educational level, marital status, alcohol consumption, and gambling (p -value < 0.05). The significant factors correlated to child abuse included family relationship and family crisis (p -value < 0.01).

It is suggested that health professionals should raise awareness and concern of child abuse problems. Interventions, including home visiting, counseling, educating family caregivers, and promoting family relationships could be an effective strategy to reduce child abuse, risks, and eliminate a cycle of violence in a family.

KEY WORDS : FAMILY CAREGIVER / CHILD ABUSE / HEALTH CONSEQUENCES

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การถูกระทำรุนแรงโดยผู้ปกครอง ต่อผลทางด้านสุขภาพร่างกาย จิตใจ และพฤติกรรม ในเด็ก
นักเรียนชั้นมัธยมศึกษาปีที่ 1-3 (CHILD ABUSE BY FAMILY CAREGIVERS AND
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บทคัดย่อ

การวิจัยเชิงสำรวจนี้มีวัตถุประสงค์เพื่อ ศึกษาอัตราความชุกของการกระทำ ความรุนแรงในเด็ก และ
ศึกษาความสัมพันธ์ระหว่างปัจจัยของผู้ดูแลเด็กในครอบครัว ครอบครัว และของเด็ก กับ การกระทำ ความ
รุนแรงในเด็ก โดยผู้ดูแลในครอบครัว ซึ่งทำการศึกษาในประชากรนักเรียนชั้นมัธยมศึกษาปีที่ 1-3
กรุงเทพฯ จำนวน 350 คน โดยการสุ่มแบบหลายขั้นตอน ระหว่างวันที่ 14 - 28 กันยายน 2545 ซึ่งเครื่องมือ
ที่ใช้ในการศึกษาค้นคว้าครั้งนี้ คือ แบบสอบถามข้อมูลจากเด็ก วิเคราะห์ข้อมูลโดยใช้การทดสอบค่าที การวิเคราะห์
ความแปรปรวนทางเดียว และสัมประสิทธิ์สหสัมพันธ์แบบเพียร์สัน

ผลจากการวิจัยพบว่า เด็กร้อยละ 88.0 ถูกกระทำรุนแรงโดยผู้ดูแลในครอบครัว รูปแบบของการกระทำ
รุนแรงที่พบมากที่สุด ด้านร่างกาย คือ ตีหรือทุบด้วยมือ ด้านจิตใจ คือ คำว่าคำขมขาย และการทอดทิ้ง
ละเลย คือ ไม่สนใจดูแลเรื่องการได้รับประทานอาหารของเด็ก โดยผลทางด้านสุขภาพต่อเด็กที่ถูกกระทำรุนแรง
นั้น ด้านร่างกายที่พบมากที่สุดคือ บาดเจ็บเล็กน้อย ไม่มีรอยหรือบาดแผล ในด้านจิตใจพบว่า เด็กส่วนใหญ่
เสียใจ และขอคำถามความรู้สึกมีคุณค่าในตนเองของเด็กที่มีค่าเฉลี่ยต่ำสุดคือ ตนเองไม่สำคัญ ไม่เด่นในชั้นเรียน
ในผลด้านพฤติกรรมพบว่า ข้อคำถามความก้าวร้าวของเด็กที่มีค่าเฉลี่ยสูงสุดคือ เด็กได้กลับอย่างเดียวกันกับผู้
ที่มาขยหายด้วย และพบว่ามีเด็กร้อยละ 34.7 ดื่มเครื่องดื่มแอลกอฮอล์ และร้อยละ 19.5 ใช้สารเสพติด จากผล
การวิเคราะห์ข้อมูล การกระทำรุนแรงเด็กมีความแตกต่างกันอย่างมีนัยสำคัญตามความแตกต่างของ อาชีพ เพศ
ผู้ดูแลเด็กในครอบครัว ระดับการศึกษาของผู้ดูแลเด็กในครอบครัว สถานภาพสมรส การดื่มแอลกอฮอล์ การ
เล่นการพนันของผู้ดูแลเด็กในครอบครัว (p -value < 0.05) ส่วนปัจจัยที่มีความสัมพันธ์กับการกระทำรุนแรง
เด็กอย่างมีนัยสำคัญทางสถิติได้แก่ สัมพันธภาพในครอบครัว และภาวะวิกฤตในครอบครัว (p -value < 0.01)

ผลจากการศึกษาค้นคว้าครั้งนี้ ให้ข้อเสนอแนะสำหรับบุคลากรทางสุขภาพ ซึ่งควรตระหนักถึงปัญหาการกระทำ
รุนแรงในเด็ก โดยการเยี่ยมบ้าน การให้คำปรึกษา การให้ความรู้แก่ผู้ดูแลเด็กในครอบครัว รวมถึงการส่งเสริม
สัมพันธภาพในครอบครัว เป็นแนวทางที่สามารถจะลดการกระทำ ความรุนแรงต่อเด็กในครอบครัว รวมถึงลด
ความเสี่ยงต่อการเกิดปัญหาดังกล่าว และตัดวงจรการกระทำ ความรุนแรงในครอบครัวได้

CONTENTS

	Page
ACKNOWLEDGEMENTS	iii
ABSTRACT	iv
LIST OF TABLES	viii
LIST OF FIGURES	x
CHAPTER I	INTRODUCTION
	• Background and significance 1
	• Research questions 4
	• Objectives 4
	• Hypotheses 4
	• Scope of the study 5
	• Variables 6
	• Definitions of variables 6
CHAPTER II	LITERATURE REVIEW
	• Child abuse
	Definitions of child abuse 11
	Types of child abuse 12
	Model of child abuse 15
	Risk factors for child abuse and neglect 15
	• The health consequences of child abuse 21
	Physical
	Psychological
	Behavioral
	• Related research
	Prevalences and relevant risk factors of child abuse 24
	Health consequences of child abuse 28

CONTENTS (CONT.)

		Page
CHAPTER III	METERIALS AND METHODS	
	• Research design	31
	• Population and sample of study	31
	• Research instruments	35
	• Validity and reliability of instruments	38
	• Data collection	38
	• Data analysis	39
CHAPTER IV	RESULTS	
	• Child characteristics	40
	• Family caregiver characteristics	42
	• Family characteristics	45
	• Characteristics of child abuse	46
	• Health consequences of abuse in children	53
	• Comparison of child abuse by family caregiver, family, and child factors	60
	• Correlation between family caregiver and family factors, and child abuse	67
CHAPTER V	DISCUSSION	69
CHAPTER VI	CONCLUSION	
	• Conclusion	84
	• Research recommendations	86
	• Recommendation for further research	88
BIBLIOGRAPHY		90
BIOGRAPHY		94

LIST OF TABLES

Table		Page
1	Frequency and percentage of children classified by their characteristics	41
2	Frequency and percentage of family caregivers classified by their characteristics	43
3	Frequency and percentage of children classified by their family characteristics	45
4	Family relationship within one year classified by mean scores and standard deviations	46
5	Frequency and percentage of children classified by experience of being abused within one year	47
6	Frequency and percentage of abused children classified by type of abuse within one year	47
7	Frequency and percentage of family caregivers classified by abusive experience their children	48
8	Frequency and percentage of abusive family caregivers classified by forms and frequencies of child physical abuse	49
9	Frequency and percentage of abusive family caregivers classified by forms and frequencies of child emotional abuse	50
10	Frequency and percentage of abusive family caregivers classified by forms and frequencies of child neglected abuse	52
11	Frequency and percentage of abused children classified by forms and frequencies of injury/physical complaints within one year	53
12	Frequency and percentage of abused children classified by emotional complaints	55
13	Child self-esteem within one year classified by mean scores and standard deviations	56
14	Child aggression within one year classified by mean scores and standard deviations	57
15	Frequency and percentage of abused children classified by kinds and frequencies of substance use and alcohol drinking within one year	59

LIST OF TABLES (CONT.)

Table	Page
16 Comparison of child abuse by family caregiver's occupation	60
17 Comparison of child abuse by family caregiver's gender	61
18 Comparison of child abuse by family caregiver's educational level	61
19 Comparison of child abuse by family caregiver's marital status	62
20 Comparison of child abuse by family caregiver's substance use	63
21 Comparison of child abuse by family caregiver's alcohol consumption	63
22 Comparison of child abuse by family caregiver's gambling	64
23 Comparison of child abuse by family type	64
24 Comparison of child abuse by child's gender	65
25 Comparison of child abuse by child's birth order	65
26 Comparison of child abuse by grade point average	66
27 Comparison of child abuse by child by relationship to family caregiver	66
28 Correlation coefficient (r) between family caregiver age, family relationship and family crisis, and child abuse	67
29 Summary of the factors associated with child abuse	68

LIST OF FIGURES

Figure		Page
1	Ecological model for understanding violence	15
2	Multilevel risk factors	16
3	Conceptual framework	30
4	Sampling procedures	34

CHAPTER I

INTRODUCTION

Background and Significance

Child abuse is one of the major and crisis public health problems worldwide. Maltreatment of children is a public health problem as perilous as any contagious diseases (Henry, Ueda, Shinjo, and Yoshikawa, 2003: 199-206). This problem is on an increasing trend in many countries. It occurs in a variety of forms and is deeply rooted in cultural, economic and social practices (Runyan, et al., 2002: 59). Since the mid-1980s, the number of the U.S. Department of Health and Human Service reported cases of child abuse and neglect has doubled (Sedlak and Broadhurst, 1996 cited in Maurer, 2000: 576). The increase has coincided with a vigorous effort to publicize child abuse as a major health issue and to influence public opinion to oppose the acceptance of violence against children (Maurer, 2000: 576). A recent estimation from WHO showed that 40 million children aged 0-14 around the world suffered from abuse and neglect and required health and social care (WHO, 1999: 17). An estimated 896,000 children were determined to be victims of child abuse or neglect in 2002. The rate of victimization per 1,000 children in the national population was 12.3 children in 2002. Child fatalities are the most tragic consequence of maltreatment. For 2002, an estimated 1,400 children died due to abuse or neglect. The overall rate of child fatalities was 2 per 100,000 children. Three-quarters (76 percent) of children who were killed were younger than 4 years old; 12 percent were 4 to 7 years old; 6 percent were 8 to 11 years old; and 6 percent were 12 to 17 years old (National Clearinghouse on Child Abuse and Neglect Information, 2004).

Child abuse can be classified into four major types as physical, emotional, sexual and neglect (Runyan, et al., 2002: 60). Neglect is most common: 57 percent of child victims were affected, 19 percent were physically abused, 10 percent were sexually abused, and 7 percent were psychologically maltreated (National Clearinghouse on Child Abuse and Neglect Information, 2003). For 2002, children ages birth to 3 years had the highest rates of victimization at 16.0 per 1,000 children. Children ages 4-7

years, 8-11 years, 12-15 years, and 16-17 years had the rates of victimization at 13.7, 11.9, 10.6, and 6.0 per 1,000 children respectively. In most cases, the perpetrator is responsible for the child's well-being and is often a parent or another caregiver. The largest percentage of perpetrators (81.0%) were parents, including birth parents, adoptive parents, and stepparents. Other relatives accounted for an additional 6.6 percent. Unmarried partners of parents accounted for 2.9 percent of perpetrators. More than one-half (53.3%) of all perpetrators were found to have neglected children. Slightly more than 10 percent (11.0%) of perpetrators physically abused children, and 6.9 percent sexually abused children (Children's Bureau, 2004).

The problem of child abuse occurs from multifactors coming together. A number of factors, including the characteristics of the individual child and his or her family, those of the caregiver or perpetrator, the nature of the local community, and the social, economic and cultural environment (Runyan, et al., 2002: 65).

Child abuse influences several health consequences in the victims, including physical, psychological and behavioral health consequences. Physical consequence, they are suffered from injuries may be manifested as cutaneous injury, skeletal trauma, or head injury. Cutaneous injury is the most common injury due to abuse (Tenney-Soeiro & Wilson, 2004: 234). Emotional/behavioral consequences, they are poor self-esteem, depression, and alcohol/drug abuse. Moreover, the long-term consequences may be had many health problems such as disability, eating/sleep disorders and abused children are more likely to be suicidal, use drugs, exhibit aggressive behaviors, and abusive in later relationships (Bergman and Brismar, 1992: 45-52; WHO, 1999: 18; Maurer, 2000: 583).

The researcher conducted a pilot study among 31 7th-9th grade students attending one of the governmental secondary schools in Bangkok Metropolis in January 2002. The purposes of this pilot study were to examine the prevalence, types and consequences of child abuse. The results showed that 67.7% of children who participated in the study were abused. Of these abused children, 52.4% as emotionally abused, 33.4% as physically and emotionally abused, 9.5% as emotionally abused and neglected, and 4.7% as physically, emotionally abused and neglected. According to the most frequency of abuse was rarely (once in 1-2 months). Forms of physical abuse included pushing (29.4%), throwing something on (29.4%), and pinching

(17.6%). Forms of emotional abuse were yelling (29.9%), verbal assaulting (20.9%), and intimidating (16.4%). Forms of neglected were not providing food (18.2%), not providing proper clothes (18.2%), and inattention or not asking or talking to children (18.2%). The results of child abuse, in physical consequences were bruises (15.0%) and scratches (12.5%), in psychological consequence was 14.3% of abused children thought that “their family didn’t want them” and in behavioral consequences included destroyed something if angry (38.1%) and sometimes alcohol drinking (28.6%).

The abuse of children is a global problem and its resolution is an aim of public health. Earlier identification of children at risk for child abuse and neglect might reduce the individual, medical, and societal costs (Rovi, Chen, and Johnson, 2004: 586-90). Solving this global problem requires a much better understanding of its occurrence in a range of settings, as well as of its causes and consequences in the settings (Runyan, et al., 2002: 59). Abuse occurs in children of all ages, but younger children are at greatest risk (Agran, et al., 2003: 683-92). Whatever, the researcher aimed to study the child abuse by their family caregivers and health consequences of abuse in 7th-9th graders. In this age, the children are adolescents who are also risked to be abused victims, because they are self-conscious and want to belong to significant others. The purpose of this study was to identify factors related to child abuse including family caregiver, family, and child factors, and illustrates the health consequences on children. However, in this study focused on only three types of child abuse: physical, emotional and neglected. This study did not include sexual abused because of the difficulty in getting sexual abused data from self-administrating questionnaire of the children. The researcher expected that the findings of this study may be able to understand a situation and guide actions on child abuse, and to raise awareness and concern among the public and professionals. Moreover, it would provide an information and understanding for health professionals to treat in prevention and intervention with the family unit.

Research Questions

What was the prevalence and health consequences of child abuse by their family caregivers and its related factors ?

Objectives

General objectives

To study the situation of child abuse, examine differences and correlations of child abuse by the family caregiver, family, child factors, and described the prevalence of physical, psychological, and behavioral health consequences.

Specific objectives

1. To determine the prevalence of child abuse by their family caregivers.
2. To determine forms of abuse by family caregivers that the children reported, including physical, emotional, and neglected abuse.
3. To determine the prevalence of physical, psychological, and behavioral health consequences in children who were abused.
4. To examine the differences of child abuse by the family caregiver, family, and child factors.
5. To examine the correlations between the family caregiver and family factors, and child abuse.

Hypotheses

1. Mean scores of child abuse were different by the family caregiver, family, and child factors.

Family caregiver factors

1.1 The family caregivers with non - manual work had lower mean score of child abuse than those with manual work and,or no work.

1.2 Females had higher mean score of child abuse than males.

1.3 The family caregivers with primary school education had higher mean score of child abuse than those who had secondary school and,or bachelor degree and higher education.

1.4 The widow/divorced/separated family caregivers had higher mean score of child abuse than those single and,or married.

1.5 The family caregivers with using substance had higher mean score of child abuse than those with no substance used.

1.6 The family caregivers with alcohol drinking behavior had higher mean score of child abuse than those who did not drink alcohol.

1.7 The family caregivers with playing gamble had higher mean score of child abuse than those who did not play gamble.

Family factor

1.1 Children living in nuclear family had higher mean score of abuse than those living in extended family.

Child factors

1.1 Girls had higher mean score of abuse than boys.

1.2 The middle children had higher mean score of abuse than the oldest, the youngest and,or the single children.

1.3 The children with low grade point average had higher mean score of abuse than those with moderate and,or high grade point average.

1.4 The step/adoptive children had higher mean score of abuse than the birth children and,or the relative - children.

2. There were correlations between the family caregiver and family factors, and child abuse.

Family caregiver factor

2.1 Family caregiver age had a negative correlation with child abuse.

Family factors

2.1 Family relationship had a negative correlation with child abuse.

2.2 Family crisis had a positive correlation with child abuse.

Scope of the study

This research focused on the 7th-9th graders attending the governmental schools, (mixed boy and girl), in Bangkok Metropolis.

Variables

Independent variables

1. The family caregiver factors included
 - 1.1 Age
 - 1.2 Occupation
 - 1.3 Gender
 - 1.4 Educational level
 - 1.5 Marital status
 - 1.6 Substance use
 - 1.7 Alcohol consumption
 - 1.8 Gambling
2. The family factors included
 - 2.1 Family type
 - 2.2 Family relationship
 - 2.3 Family crisis
3. The child factors included
 - 3.1 Gender
 - 3.2 Birth order
 - 3.3 Grade point average
 - 3.4 Child by relationship to family caregiver

Dependent variable

- Physical, emotional and,or neglected abuse of children.

Definitions of Variables

1. Child referred to a student studying in the grade 7th – 9th at the governmental school, (mixed boy and girl), in Bangkok Metropolis.
2. Family caregiver referred to a person taking care of the child in family, such as father, mother or relatives.
3. The family caregiver factors consisted of:
 - 3.1 Age referred to the family caregiver's age counted in full years.

3.2 Occupation referred to the family caregiver's current major job. Occupation was divided into 3 groups:

No work

Manual work

Non – manual work

3.3 Gender referred to male or female.

3.4 Educational level referred to the highest education of family caregiver, which were classified to 3 levels:

The primary school

The secondary school

The bachelor degree and higher

3.5 Marital status referred to the actual relationship between family caregivers and their partners regardless of marriage registration. Marital status was divided into 3 groups as followed:

Single referred to family caregivers who did not get marriage.

Married referred to family caregivers who got married and currently lived with their partners.

Widow/divorced/separated referred to family caregivers were married and currently lived without their partners.

3.6 Substance use referred to family caregiver's drug using within one year which could be divided into 2 groups:

No use referred to family caregiver did not use any substance.

Use referred to family caregiver used substance.

3.7 Alcohol consumption referred to alcohol drinking behavior of family caregiver within one year that divided into 2 groups:

No alcohol drinking referred to did not drink alcohol on regular basis.

Alcohol drinking referred to drink alcohol on regular basis.

3.8 Gambling referred to playing cards, playing lottery, betting on racing horse or betting on sports of family caregiver within one year which could be divided into 2 groups:

No playing gamble referred to did not play gamble on regular basis.

Playing gamble referred to play gamble on regular basis.

4. Family factors consisted of:

4.1 Family type referred to characteristics of the family as following described.

The nuclear family referred to the family that consisted of a husband, a wife, and children.

The extended family referred to the nuclear family living in the same household with at least an other relative or more.

4.2 Family relationship referred to role relation within family members. In meaning of relative action by family members to the less or more relationship.

4.3 Family crisis referred to the extremely stressful events or serious significantly events in the family and family members' coping abilities were used for turned to the normal family life.

5. Child factors consisted of:

5.1 Gender referred as boy or girl.

5.2 Birth order referred to the order of being born in the family as follows;

The oldest child referred to the child who was first born in the family.

The middle child referred to the child who was born within the first child and the last child in the family.

The youngest child referred to the child who was last born in the family.

The single child referred to the only one born child in the family.

5.3 Grade point average referred to studious output of the child. That scored from 1.00 – 4.00 and counted to 2 points decimal. It could be divided into 3 levels as follows;

High means score = 3.01 – 4.00

Moderate means score = 2.01 – 3.00

Low means score = 1.00 – 2.00

5.4 Child by relationship to family caregiver referred to relative status of child and family caregiver as following described.

The birth child

The step/adoptive child

The relative - child

6. Child abuse referred to three types of abuse: physical, emotional, and neglected.

6.1 Physical abuse was defined as those acts of commission by a caregiver that cause actual physical harm or have the potential for harm. (Runyan, et al., 2002: 60) such as spank, hitting, throw objects on, pinched, pushing/pulling/shaking, kicking, striking, burning with iron.

6.2 Emotional abuse included the failure of a caregiver to provide an appropriate and supportive environment, including acts that have an adverse effect on the emotional health and development of a child. Such acts include restricting a child's movements, denigration, ridicule, threats and intimidation, discrimination, rejection and other non-physical forms of hostile treatment. (Runyan, et al., 2002: 60)

6.3 Neglect referred to the failure of a parent to provide for the development of the child – in one or more of the following areas: health, education, emotional development, nutrition, shelter and safe living conditions. (Runyan, et al., 2002: 60)

7. Health consequences of child abuse referred to physical, psychological, and behavioral health consequences in the child who was abused by family caregivers including,

7.1 Physical health consequence: Injury and physical complaints such as abrasion, bruise, wound, burn, scald, fracture, headache, fainting, vomiting, convulsion which were the effects of child abuse.

7.2 Psychological health consequences

7.2.1 Child's emotional complaints referred to the emotions which were the effect of abuse by family caregivers.

7.2.2 Self – esteem is the evaluative dimension of self – knowledge, referring to how a person appraises himself or herself. High self – esteem refers to a favorable evaluation of self. Low self – esteem indicates a less positive or negative evaluation of the self (Baumeister, 1994: 83).

7.3 Behavioral health consequences

7.3.1 Aggression referred to unsuitable responses exhibited by the acts of doing and/or wording to someone in order to achieve the need to hurt/threaten them. The acts may be exhibited directly in attack, hitting, yelling to someone; or indirectly in broken things, excited acting, etc.

7.3.2 Substance use and alcohol consumption referred to child's drug use and alcohol drinking behavior.

CHAPTER II

LITERATURE REVIEW

The literature review was organized in three major parts as followed:

Part I Child abuse

1.1 Definitions of child abuse

1.2 Types of child abuse

1.3 Model of child abuse

1.4 Risk factors for child abuse and neglect

Part II The health consequences of child abuse

Part III Related research

3.1 Prevalences and relevant risk factors of child abuse

3.2 Health consequences of child abuse

Part I Child Abuse

1.1 Definitions of child abuse

World Health Organization: WHO (1999: 15) proposed the definition of child abuse as “Child abuse or maltreatment constitutes all forms of physical and/or emotional ill – treatment, sexual abuse, neglect or negligent treatment or commercial or other exploitation, resulting in actual or potential harm to the child’ s health, survival, development or dignity in the context of a relationship of responsibility, trust or power.”

Vicha Mahakun & Watcharin Pudjegvinyusakul (1983, cited in Krongyuth, K., 2001: 15) stated that “Child abuse means an act which does not technique discipline and harm to the child including in the language, a wide array of mistreatment and neglect.”

The Federal Child Abuse Prevention and Treatment Act: CAPTA (2003) as amended by the Keeping Children and Families Safe Act of 2003, defines child abuse and neglect as, at minimum: any recent act or failure to act on the part of a parent or caretaker which results in death, serious physical or emotional harm, sexual abuse or

exploitation; or an act or failure to act which presents an imminent risk of serious harm.

1.2 Types of child abuse

Maurer (2000: 578 – 580) proposes types of child abuse and neglect as follows.

1. Physical Abuse

Physical abuse is quite simply the infliction of physical harm upon a child. The selected examples of physically abusive actions such as: push, throw something, grab, spank with bare hand, kick, bite, hit with fist, spank with an object, try to hit with an object, beat up, threaten with a weapon, use a weapon, shaking.

2. Sexual Abuse

Sexual abuse is defined as any action in which the child is used as an object to meet adult sexual needs and desires. This includes actions that are assaultive and violent as well as sexually exploitive but nonviolent. Sexual contact ranges from petting to actual intercourse, including mutual masturbation or fondling and caressing of the genitals. Sexual exploitation includes the use of children to stimulate others or the posing of children for sexually explicit pornography.

3. Emotional Abuse

Emotional abuse is usually more difficult to discern and document. The actual number of cases is, again, hard to pinpoint, although experts suggest that cases of emotional abuse occur much more frequently than cases of physical abuse. The National Center on Child Abuse and Neglect: NCCAN (1996c) notes that emotional abuse is almost always presented when other types of abuse or neglect are found.

Emotional abuse is an ongoing, substantive effort, rather than an isolated instance. It involves actions that depreciate the victim's self-worth and can be nonverbal as well as verbal. The perpetrator directs efforts toward convincing the victim that he or she is worthless, stupid, repulsive, crazy, unwanted, or unloved. Children subjected to constant criticism will eventually believe that they are "bad." The child frequently reacts to this type of abuse by holding in or not expressing feelings to avoid additional abuse. Repressed feelings usually present through other outlets.

4. Neglect

Neglect is a failure to provide for the child's basic needs (NCCAN,1996c). It can be either physical or emotional or a combination of the two. The distinguishing feature of neglect is omission (a failure to act). Commitment of an action (commission) is the distinguishing feature of abuse.

Physical neglect involves the failure to provide adequate food, clothing, and shelter, which are the basic necessities to maintain physical well-being. Negligent behavior would include failure to ensure that a child is adequately clothed for the weather (e.g., allowing summer shorts or no outer-wear during a snowstorm) or failure to protect against accidental injury (e.g., allowing children to play on a window ledge with no safeguard against falls).

Emotional neglect involves the failure to foster feelings of love, belonging, and recognition in the child. The child receives little attention, and opportunities that would enhance feelings of self-esteem, belonging, and self-efficacy are not provided or are blocked. In some instances there is a combination of emotional and physical neglect resulting in outright "ignoring" of the child.

Runyan, et al. (2002: 60) proposes the four types of child maltreatment by caregivers as follows.

Physical abuse of a child is defined as those acts of commission by a caregiver that cause actual physical harm or have the potential for harm.

Sexual abuse is defined as those acts where a caregiver uses a child for sexual gratification.

Emotional abuse includes the failure of a caregiver to provide an appropriate and supportive environment, and includes acts that have an adverse effect on the emotional health and development of a child. Such acts include restricting a child's movements, denigration, ridicule, threats and intimidation, discrimination, rejection and other non-physical forms of hostile treatment.

Neglect refers to the failure of a parent to provide for the development of the child – where the parent is in a position to do so – in one or more of the following areas: health, education, emotional development, nutrition, shelter and safe living conditions. Neglect is thus distinguished from circumstances of poverty in that neglect

can occur only in cases where reasonable resources are available to the family or caregiver.

National Clearinghouse on Child Abuse and Neglect Information: What is Child Abuse and Neglect ? (2004) proposes the most states recognize four major types of maltreatment: neglect, physical abuse, sexual abuse, and emotional abuse. Although any of the forms of child maltreatment may be found separately, they often occur in combination. The examples provided below are for general informational purposes only. Not all States' definitions will include all of the examples listed below.

Neglect is failure to provide for a child's basic needs. Neglect may be:

- Physical (e.g., failure to provide necessary food or shelter, or lack of appropriate supervision)
- Medical (e.g., failure to provide necessary medical or mental health treatment)
- Educational (e.g., failure to educate a child or attend to special education needs)
- Emotional (e.g., inattention to a child's emotional needs, failure to provide psychological care, or permitting the child to use alcohol or other drugs)

Physical Abuse is physical injury (ranging from minor bruises to severe fractures or death) as a result of punching, beating, kicking, biting, shaking, throwing, stabbing, choking, hitting (with a hand, stick, strap, or other object), burning, or otherwise harming a child. Such injury is considered abuse regardless of whether the caretaker intended to hurt the child.

Sexual Abuse includes activities by a parent or caretaker such as fondling a child's genitals, penetration, incest, rape, sodomy, indecent exposure, and exploitation through prostitution or the production of pornographic materials.

Emotional Abuse is a pattern of behavior that impairs a child's emotional development or sense of self-worth. This may include constant criticism, threats, or rejection, as well as withholding love, support, or guidance. Emotional abuse is often difficult to prove and, therefore, emotional abuse is almost always present when other forms are identified.

In this study focused on only physical, emotional, and neglected abuse among 7th – 9th graders in Bangkok Metropolis.

1.3 Model of child abuse

Violence is the result of the complex interplay of individual, relationship, social, cultural and environmental factors. No single factor explains why some individuals performed violently toward others. So ecological model is applied to help understand the multifaceted nature of violence. First introduced in the late 1970s, this model was initially applied to child abuse. The ecological model is the most widely adopted explanatory model to explain the occurrence of abuse within families. (See Figure 1) As applied to child abuse and neglect, the ecological model considered a number of factors, including the characteristics of the individual child and his or her family, those of the caregiver or perpetrator, the nature of the local community, and the social, economic and cultural environment. (Dahlberg & Krug, 2002: 12; Runyan, et al., 2002: 65)

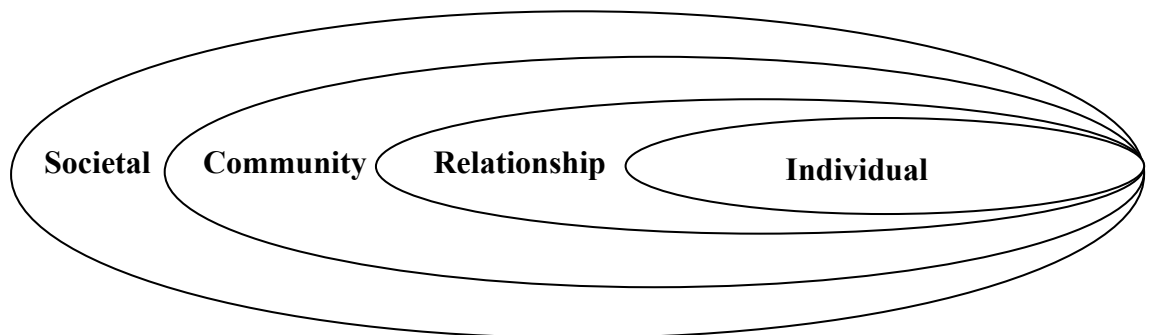


Figure 1 Ecological model for understanding violence

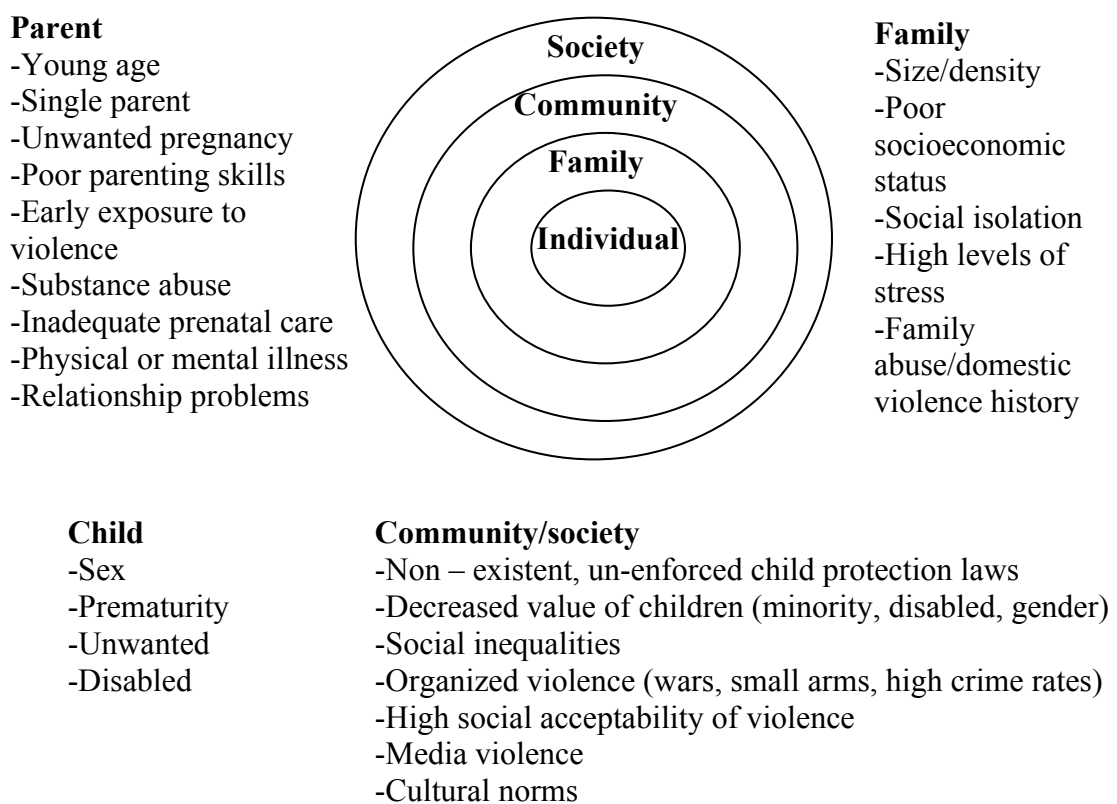
Source: Dahlberg & Krug, 2002: 12

1.4 Risk factors for child abuse and neglect

Child abuse is the result of many factors coming together in a complex interplay. These contributing elements called risk factors, increase the likelihood of abuse. There is no single factor that can adequately account for the high levels of child abuse

worldwide. In considering the many interrelated factors that contribute to child abuse, figure 2 illustrates some of the more important factors operating at four levels. These levels are individual, the family, the community and broader societal and cultural values (WHO, 1999: 21).

Figure 2 Multilevel risk factors



Source: WHO, 1999: 22

To date there is no accurate method to predict which individuals at risk will actually engage in violent behavior. An individual's use of violence seems to be influenced by a variety of factors both external [family, society, and other environmental conditions] and internal [innate personality characteristics] (Maurer, 2000: 572).

National Clearinghouse on Child Abuse and Neglect Information: Risk and Protective Factors for Child Abuse and Neglect (2004) described that from most theories of child maltreatment recognize that the root causes of child maltreatment can be organized into a framework of four principal systems: (1) the child, (2) the family, (3) the community, and (4) the society. The following was a summarize common risk factors for child abuse and neglect.

Child risk factors

Premature birth, birth anomalies, low birth weight, exposure to toxins in utero

Temperament: difficult or slow to warm up

Physical/cognitive/emotional disability, chronic or serious illness

Childhood trauma

Anti-social peer group

Age

Child aggression, behavior problems, attention deficits

Parental/Family risk factors

Personality factors

External locus of control

Poor impulse control

Depression/anxiety

Low tolerance for frustration

Feelings of insecurity

Lack of trust

Insecure attachment with own parents

Childhood history of abuse

High parental conflict, domestic violence

Family structure – single parent with lack of support

Social isolation, lack of support

Parental psychopathology

Substance abuse

Separation/divorce, especially high conflict divorce

Age

High general stress level

Poor parent-child interaction, negative attitudes and attributions about child's behavior

Inaccurate knowledge and expectations about child development

Social/Environmental risk factors

Low socioeconomic status

Stressful life events

Lack of access to medical care, health insurance, adequate child care, and social services

Parental unemployment; homelessness

Social isolation/lack of social support

Exposure to racism/discrimination

Poor schools

Exposure to environmental toxins

Dangerous/violent neighborhood

Community violence

Based on the ecological model and risk factors were used to explain the factors which had been associated with child abuse as followed.

Family caregiver age

American Association for Protecting Children [AAPC], 1990; Children's Defense Fund, 1995 (cited in Maurer, 2000: 577) stated that statistics of reported cases show individuals who are young are more frequent abusers.

Runyan, et al. (2002: 67 – 68) revealed that physically abusive parents are more likely to be young than their non – abusing counterparts.

Children's Bureau (2004) presented the data for 2002 about age of child maltreated perpetrators. It was summarized that the perpetrators whose aged younger than 30 years, 30-39 years, 40-49 years, and older than 49 years had the percentages of child maltreatment at 37.5, 39.5, 17.5, and 5.5 percent, respectively.

Family caregiver occupation

Runyan, et al. (2002: 67–68) proposed that physically abusive parents are more likely to be unemployed and poor than their non – abusing counterparts.

Tenney – Soeiro and Wilson (2004: 233) stated that the studies on the topic have shown that the association between domestic violence and child maltreatment is related to lower occupational or socioeconomic status.

Family caregiver gender

Gelles (1993: 22-37) proposed that statistically women tend to abuse more frequently than men, perhaps because they are more often the primary child – care providers.

Children’s Bureau (2004) found that, for 2002 women comprised a larger percentage of all perpetrators than men, 58.3 percent compared to 41.7 percent. In most cases, the perpetrator is responsible for the child’s well-being and is often a parent or another caregiver. The largest percentage of perpetrators (81.0 %) were parents, including birth parents, adoptive parents, and stepparents. Other relatives accounted for an additional 6.6 percent. Unmarried partners of parents accounted for 2.9 percent of perpetrators. Female perpetrators were mostly mothers and male perpetrators were mostly fathers.

Family caregiver education level

Wolfner and Gelles (1993, cited in Maurer, 2000: 578) proposed the result in family studies that the rate of abusive incidents is relatively stable across educational levels of parents.

Runyan, et al. (2002: 67 – 68) showed that physically abusive parents are more likely to have less education than their non – abusing counterparts. Studies from Bangladesh, Colombia, Italy, Kenya, Sweden, Thailand and the United Kingdom have also found that low education and a lack of income to meet the family’s needs increase the potential of physical violence toward children.

National Clearinghouse on Child Abuse and Neglect Information: Child Abuse and Neglect Fatalities: Statistics and Interventions (2003) stated that studies have addressed factors that increase one’s likelihood of becoming a perpetrator of child maltreatment, and they report that adults in their mid-20s who have not completed high school and live at or below the poverty level are at greater risk.

Family caregiver marital status

Runyan, et al. (2002: 67 – 68) proposed that physically abusive parents are more likely to be single than their non – abusing counterparts. In a case – control study in

Buenos Aires, Argentina, for instance, children living in single – parent families were at significantly greater risk for abuse than those in two – parent families.

Alcohol and drug abuse

Browne and Herbert (1997, cited in Maurer, 2000: 574) revealed that studies indicate that excessive use of drugs and alcohol is positively correlated with the incidence of violent behavior both inside and outside the family.

National Clearinghouse on Child Abuse and Neglect Information: Risk and Protective Factors for Child Abuse and Neglect (2004) presented about one of important characteristics of the family is linked with child maltreatment. Families in which there is substance abuse are more likely to experience abuse or are at a higher risk of abuse.

Child gender

National Clearinghouse on Child Abuse and Neglect Information (2004) showed that, for 2002 girls were slightly more likely to be victims than boys.

Special characteristics of child

Runyan, et al. (2002: 66) stated that it is believed that low birth weight, prematurity, illness, or physical or mental handicaps in the infant or child interfere with attachment and bonding and may make the child more vulnerable to abuse. However, these characteristics do not appear to be major risk factors for abuse when other factors are considered, such as parental and societal variables.

Family type

Jecker (1993: 776-80) described that there is a reluctance to breach family privacy. Neighbors, other family members, and authority figures are often unwilling to intervene because family issues are considered private matters.

Maurer (2000: 576) proposed that the structure of modern family living arrangements also works to ensure the privacy of family violence. Since the late 1800s family size has decreased, and multigenerational family living arrangements have sharply declined. As a result there are fewer family members to assert social controls and stop family violence.

Family crisis

Gelles (1993: 22-37) stated that some individuals may cope well with minor incidents but find a series of stressful incidents hard to handle. For example, the higher the level of stress within the family, the greater the risk of child abuse.

Roberts and Quillian, 1992; Hammond and Yung, 1993; Browne and Herbert, 1997 (cited in Maurer, 2000: 574) proposed that the inability to handle stressful situations or exposure to an increasing number of stressors is associated with violent behavior.

Runyan, et al. (2002: 68) described that stress and social isolation of the parent have also been linked to child abuse and neglect. It is believed that stress resulting from job changes, loss of income, health problems or other aspects of the family environment can heighten the level of conflict in the home and the ability of members to cope or find support.

National Clearinghouse on Child Abuse and Neglect Information: Child Abuse and Neglect Fatalities: Statistics and Interventions (2003) proposed that, the studies have addressed factors that increase one's likelihood of becoming a perpetrator, and they report that adults in their mid – 20s who may have difficulty coping with stressful situations is the one of factors at greater risk.

Part II The Health Consequences of Child Abuse

Child abuse influences several health consequences in the victims, including physical, psychological and behavioral health consequences. In these literature reviews illustrated the effects of child abuse.

King, et al. (1988: 585-89) found that 76 % of abusive fractures in children were in the long bones, 8 % in the skull, and 8 % in the rib cage. It is no surprise that skeletal manifestations of abusive injury are seen much more commonly in infants and young children than in older children; this is related to the decreasing size differential of the child relative to the perpetrator.

In long – term consequences, physically abused individuals are more likely to be suicidal, use drugs, and exhibit aggressive behaviors (DePanfilis and Salus, 1992 cited in Maurer, 2000: 583).

Runyan, et al. (2002: 69-70) proposes the health consequences of child abuse as follows:

Ill health caused by child abuse forms a significant portion of the global burden of disease. Importantly, there is now evidence that major adult forms of illness- including ischaemic heart disease, cancer, chronic lung disease, irritable bowel syndrome and fibromyalgia - are related to experiences of abuse during childhood. The apparent mechanism to explain these results is the adoption of behavioural risk factors such as smoking, alcohol abuse, poor diet and lack of exercise. Research has also highlighted important direct acute and long-term consequences as follows:

Health consequences of child abuse

Physical

- Abdominal/thoracic injuries
- Brain injuries
- Bruises and welts
- Burns and scalds
- Central nervous system injuries
- Disability
- Fractures
- Lacerations and abrasions
- Ocular damage

Sexual and reproductive

- Reproductive health problems
- Sexual dysfunction
- Sexually transmitted diseases, including HIV/AIDS
- Unwanted pregnancy

Psychological and behavioural

- Alcohol and drug abuse
- Cognitive impairment
- Delinquent, violent and other risk-taking behaviours
- Depression and anxiety
- Developmental delays

- Eating and sleep disorders
- Feelings of shame and guilt
- Hyperactivity
- Poor relationships
- Poor school performance
- Poor self-esteem
- Post-traumatic stress disorder
- Psychosomatic disorders
- Suicidal behaviour and self-harm

Other longer-term health consequences

- Cancer
- Chronic lung disease
- Fibromyalgia
- Irritable bowel syndrome
- Ischaemic heart disease
- Liver disease
- Reproductive health problems such as infertility

Similarly, there are many studies demonstrating short-term and long-term psychological damage. Some children have a few symptoms that do not reach clinical levels of concern, or else are at clinical levels but not as high as in children generally seen in clinical settings. Other survivors have serious psychiatric symptoms, such as depression, anxiety, substance abuse, aggression, shame or cognitive impairments. Finally, some children meet the full criteria for psychiatric illnesses that include post-traumatic stress disorder, major depression, anxiety disorders and sleep disorders.

Physical, behavioural and emotional manifestations of abuse vary between children, depending on the severity of the abuse, the relationship of the perpetrator to the child, the length of time over which the abuse continues and other factors in the child's environment.

Vermeiren, et al. (2003: 535-40) revealed that rates of drug use are also higher in victims of abuse and neglect. Adolescents with alcohol dependence were 6 to 12 times more likely to have childhood histories of physical abuse.

Gushurst (2003: 919-38) showed the longitudinal studies, 74 % of adolescents who had been maltreated had at least one adjustment problem, such as clinically deviant levels of aggression, anxiety, or depression; running away from home; gang membership, compared with 43 % of adolescents who had not been maltreated.

Tenney-Soeiro and Wilson (2004: 234-36) studied “An Update on Child Abuse and Neglect” revealed that in general, nonaccidental injuries may be manifested as cutaneous injury, skeletal trauma, or head injury. Cutaneous injury is the most common injury due to abuse. Skeletal trauma is the second most common manifestation of abuse. In the past year, much has been published about head injury and physical abuse. Non-accidental head injury may include skull fracture, subdural or subarachnoid hemorrhages, and parenchymal injuries.

The long-term effects of child abuse and neglect are discussed frequently. Behavioral health studies show that victims of violence experience more depression and aggression.

Part III Related Research

3.1 Prevalences and relevant risk factors of child abuse

Petsuksiri, P. (1996: 71-82) studied factors affecting family violence and aggression in Thai youth. The sample consisted of 2,147 students who studied in senior secondary school in Bangkok Metropolis and regional areas. The result revealed that Thai youths were tolerant to family violence. The factors affecting family violence were found as low education, labour occupation, gambling, lack of social networks, and family stress. Also, family violence was positively correlated with family violence acceptance level and aggression in Thai youths.

Nitirat, P. (1997: 84-92, 131-52) studied factors relating to child abuse in family: study of prathomsuksa 6 students of Bangkok Metropolitan school. The sample included 413 students of 4 Bangkok Metropolitan schools. The result showed that 81.8 % of students were abused by their guardians: physical abuse, emotional abuse, and neglect were found for 66.1 %, 64.2 %, and 40.0 % of the students respectively and no sexual abuse was found in this study. In 273 physical abused children, three popular forms of physical abuse included: hitting with the hand (79.5 %), whipping by a rod or a belt (53.5 %), and throw something on (39.6 %) and severe physical

abuse included knocked head or body against floors or walls (5.1 %), kicking/struck (4.8 %), use a weapon (2.2 %), and trampled (1.5 %) respectively. In 265 emotional abused children, three topmost forms of emotional abuse were scolding with a rude language (75.8 %), calling as the animals (54.3 %), and yelling (51.7 %). In term of child factor, it was found that the step/adoptive children had higher mean score of abuse by their guardians than the birth children and the relative/resident – children with significantly associate. In guardian factors: the guardians with non-manual work had lower mean score of abuse to their children than those with manual work and no work, the guardians with sometimes and regularly gambling had higher mean score of child abuse than those who no gambling with significantly associated. Whereas educational level of the guardians showed a significantly negative correlation to child abuse. The family factor which showed a significantly positive correlation to acts of child abuse by guardians was family crisis. Whereas family relationship was the family factor which showed a significantly negative correlation to child abuse. In term of family type found that children living in nuclear family had higher mean score of abuse by their guardians than those living in extended family with significantly associate. While, guardian gender, marital status, guardian alcohol drinking, guardian age, and child gender were the factors that had not significantly associated with child abuse.

Auewattana, P. (1999: 92, 142-47) studied physical and emotional violence towards children by parents: study among prathomsuksa 6 students in the schools of the department of primary school muang district, Amnatcharoen province. The sample consisted of 212 students. The results showed that 95.3 % of the students were treated violently by their parents. Physical only, emotional only, and physical and emotional violence were found for 5.0, 23.3, and 71.7 percent of students who were treated violently respectively. The violators were mothers (54.5 %) more than fathers (45.5 %). The most common physical violence was whipping by a rod or a belt and the most common emotional violence was obscene utterance. The factor which showed a significantly positive correlation to overall violent acts by fathers was family crisis. Whereas grade point average and family relation showed a significantly negative correlation to violent acts by fathers. The violators were mothers, it was found that family relation showed a significantly negative correlation but family crisis showed a

significantly positive correlation to violent acts. While, child gender, birth order, and family type were the factors that had not significantly associated with child abuse.

Krongyuth, K. (2001: 85-110) studied child abuse by guardian among students grade 5 – 6 of Bangkok Metropolitan schools. The sample consisted of 370 students from 6 schools. The result showed that 90.8 % of students were abused at least once by their guardians. Physical only, emotional only, and physical and emotional abuse were found for 3.8, 18.0, and 69.0 percent of the students respectively. In 370 students, the three topmost methods of physical abuse were hitting by a rod or belt (48.6 %) ; slapping on face, head and back (31.6 %) ; and pushing and/or pulling body (23.8 %). Severe physical abuse including cigarette burning (2.2 %) and burning with iron (2.4 %) were also found. The five topmost methods of emotional abuse in 370 students were yelling (66.5 %), verbal assaulting (51.1 %), enforcing isolation and restriction of movement (38.4 %), indirect verbal assaulting (32.4 %) and calling as the animals (23.5 %). In child factor found that, the boys had higher mean score of abuse by their guardians than the girls with significantly associate. In guardian factors: the divorced/separated guardians had higher mean score of abuse to their children than the marriage guardians, the guardians with primary school education had higher mean score of abuse to their children than those who had bachelor degree and higher education, and the guardians with alcohol drinking behavior had higher mean score of abuse to their children than those who without alcohol drinking behavior with significantly associate. The family factor which showed a significantly positive correlation to acts of child abuse by guardians was family crisis. Whereas family relationship was the family factor which showed a significantly negative correlation to acts of child abuse by guardians. While, birth order, guardian gender, occupation, guardian gambling, guardian substance use, guardian age, and family type were the factors that had not significantly associated with child abuse.

Kongkaew, D. (2001: 75-86) studied child abuse and effects of abuse on physical, psychological, and social well – being among primary school children, 1st – 4th grade in Bangkok Metropolis. The sample consisted of 450 graders from 6 primary schools. The data showed that 87.1 % (392) of children were abused by their guardians. One type only and more than one type of 392 abused children were found for 14.3 % and 85.7 % respectively. In 392 children, the five popular forms of

physical abuse included: pulled or twisted ears (34.4 %), pinched very hard (34.2 %), squeezed arms (31.1 %), spanked with a rod/belt/electric line/broom/whisk (28.3 %), and hitting by a fist (27.8 %). Severe physical abuse included knocked the heads or bodies against floors or walls (7.4 %) and pressed cigarette on skin (3.8 %). Five most common forms of emotional abuse were: talking to the children with rude or offensive language (37.5 %), blaming them for the same mistake many times (36.7 %), scolding them in front of their friends (33.4 %), prohibiting to play with friends (32.1 %), and threatening with horrible events (29.6 %). Severe emotional abuse included tying the children up (7.7 %) and punishing with restriction of food or water (7.4 %). According to neglected abuse in 392 children, the five topmost forms were: forcing the children to wash their clothes by themselves (34.4 %), stay home alone without adult (29.3 %), didn't teaching them about what was right or wrong (26.0 %), let them had food at home alone (24.2 %), and didn't pay attention and send them to bed when there is time to sleep (22.7 %).

Perez – Albeniz and De Paul (2004: 289 – 300) studied of family relationship that compared 19 high – and 26 low – risk parents for child physical abuse who were selected from a total sample of 331 parents of the Spanish general population. Both groups were statistically matched on sociodemographic variables. Findings of the study supported that high – risk parents for child physical abuse show a deficit both in general empathy and in empathy toward their family members.

Sebre, et al. (2004: 113 – 27) studied the relationship between alcohol use and child abuse by parent. The study used 1,145 children ages 10 – 14 years from Latvia, Lithuania, Macedonia, and Moldova to participate in this study. They completed questionnaires assessing their experience of emotional or physical abuse and provided information about family risk – factors. Result showed that, in all four countries, parental overuse of alcohol was associated with emotional and, or physical abuse.

From the literature reviews including, model of child abuse, risk factors and related studies/researches of child abuse, it can be seen that there are many factors which related to child abuse. In this study, the researcher selected some of factors that linked most affected to child abuse in family. The selected family caregiver factors were age, occupation, gender, educational level, marital status, substance use,

alcohol consumption, and gambling. The family factors included family type, family relationship, and family crisis. The selected child factors were gender, birth order, grade point average, and child by relationship to family caregiver.

3.2 Health consequences of child abuse

Nitirat, P. (1997: 86-87, 92-93) studied factors relating to child abuse in family: study of prathomsuksa 6 students of Bangkok Metropolitan school. The sample included 413 students of 4 Bangkok Metropolitan schools. The result showed that 81.8 % of students were abused by their guardians. Results found that 57.1 % of children who were treated physical violently by their guardians had minor injury and no lesion, 37.8 % had bruises which were easily noticed, and 5.1 % had bleeding wounds. The consequences of emotional violently children mostly found were sadness (39.6 %), wanted to escape from home (24.5 %), and none (13.6 %) respectively. Whatever, the severe consequence of emotional violence showed that 7.6 % had depressed and wanted to die.

Auewattana, P. (1999: 142-43) studied physical and emotional violence towards children by parents: study among prathomsuksa 6 students in the schools of the department of primary school muang district, Amnatcharoen province. The sample consisted of 212 students and 95.3 % of them were treated violently. It was found that 94.2 % of children who were treated physical violently by their parents had minor injury and no lesion, 25.2 % had bruises which were easily noticed, and 10.3 % had bleeding wounds. The consequences of emotional violence in children mostly found were sadness (74.0 %), wanted to escape from home (52.1 %), none (47.4 %), and resentment and wanted to fight back (27.6 %) respectively. Severe consequence of emotional violence showed that 18.2 % had depressed and wanted to die.

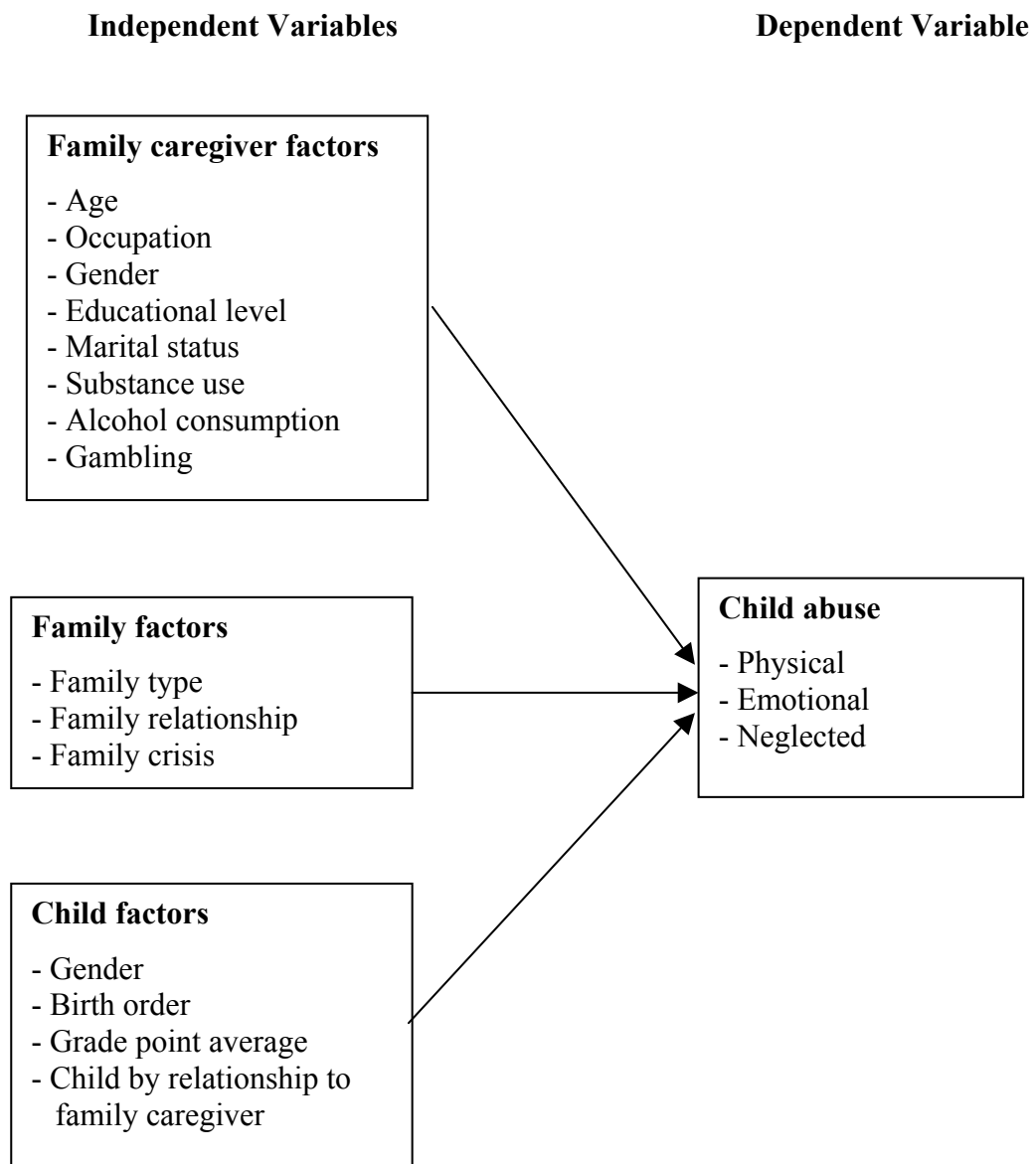
Krongyuth, K. (2001: 80-84) studied child abuse by guardian among students grade 5-6 of Bangkok Metropolitan schools. The sample included 370 students of 6 schools. It reported that the consequences of physical abuse were minor abuse and no lesion (62.7 %), bruise lesion (29.7 %), bleeding lesion (18.1 %), and severe trauma and needed treatment (5.9 %). The consequences of emotional abuse in children mostly found were crying (62.2 %), sadness (60.8 %), none (57.0 %), depressed (51.9 %), and contradict (43.2 %) respectively. Severe consequences of

emotional abuse showed that 87 students (23.5 %) reported aggressive with siblings, and 35 students (9.5 %) reported self – injury.

Kongkaew, D. (2001: 87-90) studied child abuse and effects of abuse on physical, psychological, and social well – being among primary school children, 1st – 4th grade in Bangkok Metropolis. The sample consisted of 450 graders from 6 primary schools. In 87.1 % (392) of children who were abused by their guardians, showed that 93 children had lesions (23.7 %), and the most common abusive lesions were: scars (55.9 %) ; scratches (22.6 %) ; bruises (7.5 %); and ecchymosis (4.3 %). According to 96.2 % of abused children had somatic complaints. The results of abused children' self – esteem showed that 20.4 %, 67.1 % and 12.5 % of them had low, moderate and high self – esteem respectively, and the abused children (20.4 %) had low self – esteem scores more than the non – abused children (8.6 %). The study found that 67.6 percent of abused group had aggressive behavior including, high aggression (15.1 %), moderate aggression (21.1 %), and low aggression (63.8 %) more than non – abused group (51.7 %).

From the literature reviews about health consequences in abused children, it can be seen that there are many health consequences that affected abused children. In this study, the researcher selected some of health consequences that to be the most expected effects from child abuse. The physical health consequence was injury/physical complaints. The psychological health consequences consisted of child's emotional complaints and child self-esteem. The behavioral health consequences included child aggression, and child substance use and alcohol consumption.

Figure 3 Conceptual Framework



CHAPTER III

MATERIALS AND METHODS

This chapter described the methodology of this study including research design, population and sample of study, instrumentation, data collection, and data analysis.

Research Design

This research was a descriptive study.

Population and Sample of Study

Population

The population of this research was the 7th – 9th graders attending the governmental schools, (mixed boy and girl), in Bangkok Metropolis. Total number of the 7th – 9th graders in 101 governmental schools were 143,599 students.

Inclusion criteria

1. The 7th- 9th graders who were willing to participate in answering questionnaire.
2. The 7th- 9th graders who were literate.

Exclusion criteria

The 7th-9th graders who had not consent form from the guardian.

Sample size

The following formula was employed to calculate the sample size (Wayne, 1995: 180-181).

$$n = \frac{Z_{\alpha/2}^2 PQ}{d^2}$$

Where as;

n = Sample size of this study

$Z_{\alpha/2}$ = 1.96

P = Proportion of child abuse = 0.68. It was estimated from the pilot study that the probability of child abuse among 7th-9th graders at 1 governmental school in Bangkok Metropolis in January, 2002. All of 31 children in pilot study, 67.7 % were abused.

Q = 1 – P = 0.32

d = The standard error = 0.05

$$n = \frac{(1.96)^2 (0.68) (0.32)}{(0.05)^2}$$

$$= 334.37$$

Sample size of this study has to be at least 335 students. It was planned totally 350 students in this study to prevent incompleted data or missing information.

Sampling procedures

In this study, multistage random sampling method was used to obtain representative of the samples. The sampling procedures were as follows:

1. Bangkok metropolitan was divided into 6 areas account to the Bangkok administrative: Wanglaung, Burapa, Srinakarin, Jaopraya, North Krungthon, and South Krungthon .

2. In these 6 areas, the researcher randomly chose only one area by the simple random sampling method. The result was Wanglaung and in this area was divided into 9 districts.

3. The researcher made the 2nd randomly chose only one district from these 9 districts by the simple random sampling method and Bang - Sue was chosen.

4. There were 3 governmental schools in Bang – Sue district and all of them were taken to participate in this study.

5. In two schools, the researcher randomly picked up two classrooms in each level, 7th-9th grade and in another one randomly picked up one classroom in 7th-8th grade, two classrooms in 9th grade due to the classroom sizes by the simple random sampling method.

6. In the total of 350 students, the proportional simple random sampling was used to select the samples from each level in each school (the proportionate number of 7th, 8th and 9th graders). Participants were calculated for each group by using the formular as followed:

$$n_g = \frac{N_g \times n}{N}$$

N = Population (total 7th-9th graders in 3 schools)

N_g = Population each group

n = Total sample size

n_g = Sample size each group

Sample calculation (each level in each school);

School A

$$n_{\text{grade7}} = \frac{473 \times 350}{3,386} = 48.9 = 49 \text{ students}$$

$$n_{\text{grade8}} = \frac{489 \times 350}{3,386} = 50.4 = 50 \text{ students}$$

$$n_{\text{grade9}} = \frac{431 \times 350}{3,386} = 44.6 = 45 \text{ students}$$

School B

$$n_{\text{grade7}} = \frac{421 \times 350}{3,386} = 43.5 = 43 \text{ students}$$

$$n_{\text{grade8}} = \frac{413 \times 350}{3,386} = 42.7 = 43 \text{ students}$$

$$n_{\text{grade9}} = \frac{307 \times 350}{3,386} = 31.7 = 32 \text{ students}$$

School C

$$n_{\text{grade7}} = \frac{338 \times 350}{3,386} = 34.9 = 35 \text{ students}$$

$$n_{\text{grade8}} = \frac{267 \times 350}{3,386} = 27.6 = 28 \text{ students}$$

$$n_{\text{grade9}} = \frac{247 \times 350}{3,386} = 25.4 = 25 \text{ students}$$

Total sample size was 350 students and the sampling procedures were in the figure 4.

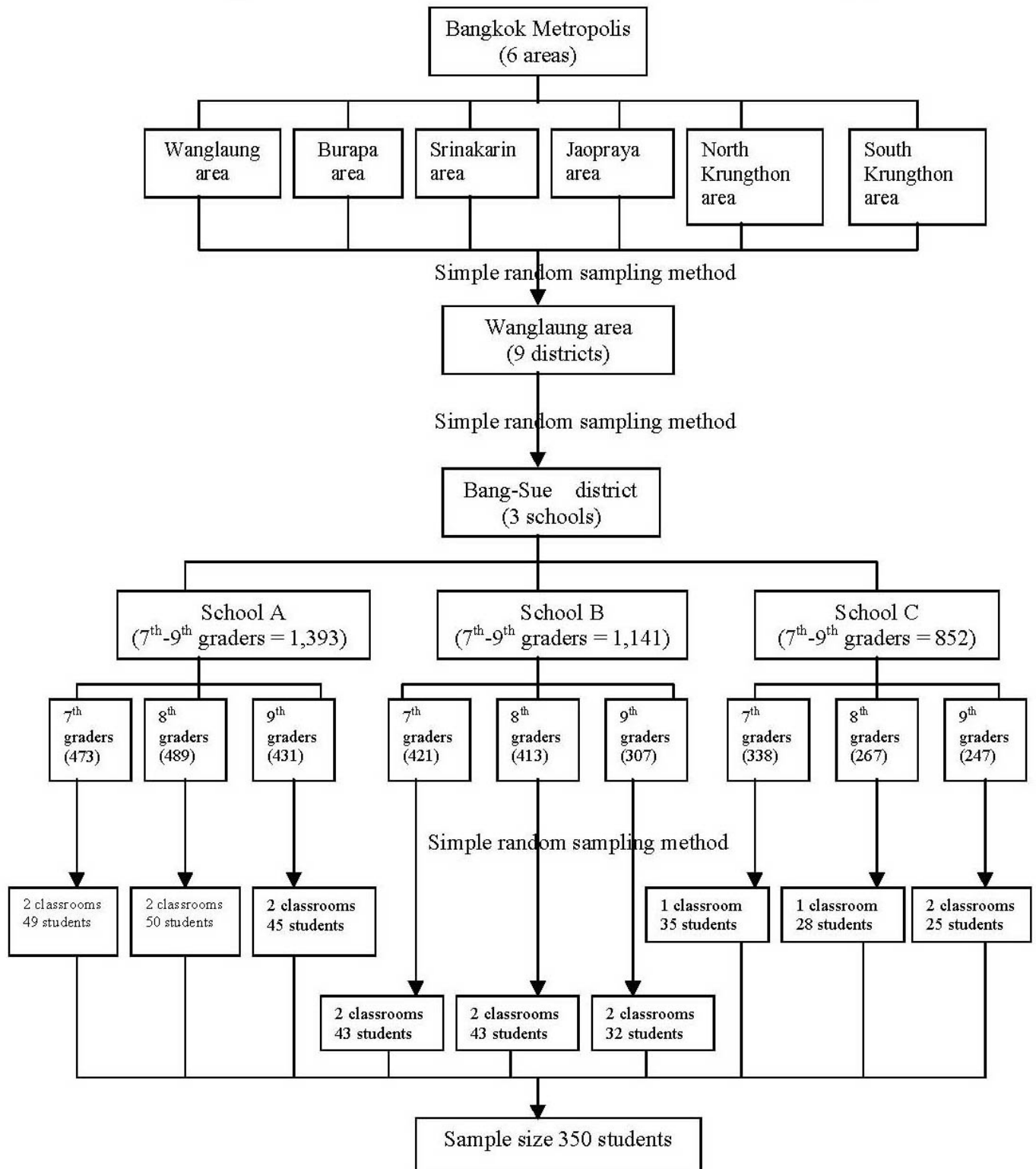


Figure 4: Sampling procedures

Research Instruments

The data were collected by using self-administrating questionnaires. The questionnaires were divided into 2 parts: **part I** consisted of general information of all the samples, family relationship, family crisis, forms of child abuse, and **part II** included health consequences reported by the children who were abused by their family caregivers.

Part I The questionnaire was divided into 4 sections as follows.

Section I General information

This section comprised of 15 items of the child characteristics: gender, age, grade point average in the last year, birth order, and child by relationship to family caregiver; the family caregiver characteristics: gender, age, occupation, educational level, marital status, substance use, alcohol consumption, and gambling behavior (within one year); and one item of the family type: the nuclear and extended family.

Section II Family relationship

This questionnaire referred to the family relationship within one year. The researcher had modified this questionnaire from the questionnaire of Nitirat, P. (1997: 10, 167-68) in which based on Morrow & Wilson 's family relation. There were 10 items, with 5 positive and 5 negative items. Only one choice could be selected from the 3 – point scale. The scoring scheme was as followed,

Score	Positive items	Negative items
3	regularly (once in every week)	never
2	sometimes (once in every month)	sometimes (once in every month)
1	never	regularly (once in every week)

The score of 10 items were summed up, the total score ranged from 10 – 30 and the mean score in each item was ranged between 1-3.

Section III Family Crisis

The questionnaire was developed based on Holmes and Rache (1967: 217) to measure the family crisis within one year, one score was given for each item that indicated family crisis. The questionnaire included 8 family crisis' s items, the score ranged from 0-8 and categorized into 2 levels of yes/no of family crisis as follows;

No family crisis means no item that indicated family crisis (score of 0)

Have family crisis means have one or more items that indicated family crisis
(score of 1 and up)

Section IV Forms of child abuse by family caregiver

This questionnaire was modified by the researcher based on literature reviews and regarding forms of child abuse by family caregiver within one year. It was divided into three subsections with 34 items:

Subsection I 14 items of physical abuse

Subsection II 11 items of Emotional abuse

Subsection III 9 items of Neglected abuse

Each item of abuse frequency was divided into four categories: none, rarely (once in 3-6 months), sometimes (once in every month), and regularly (once in every week). In each category of abuse, there were three levels of severity: mild, moderate, and severe.

The frequency categories were scored as: none = 0, rarely = 1, sometimes = 2, and regularly = 3. The levels of severity were scored as: mild = 1, moderate = 2, and severe = 3. Each item was paired up and multiplied between frequency and level of severe action, and finally were summed them up.

Part II The Health Consequences of Child Abuse were divided into 4 sections as follows.

Section I Injury/physical complaints and emotional complaints of the child who was abused

The questionnaire was modified by the researcher based on literature review. It was divided into two subsections :

Subsection I: Injury and physical complaints (19 items) within one year which were divided into four categories: none, rarely (once in 3-6 months), sometimes (once in every month), and regularly (once in every week) with only one choice selection in each item.

Subsection II: Child's emotional complaints, it included 8 items of emotional complaint of the child who was abused by family caregivers.

Section II Child self – esteem

There were 8 positive and 7 negative items regarding child self-esteem within one year. The researcher had modified this questionnaire from Dockaew, R. (1996: 83, 167) who also modified it from the Hare self – esteem scale. Only one choice could be selected from the five categories. The categories were scored as:

Score	Positive questions	Negative questions
5	very agree	very non-agree
4	agree	non-agree
3	not sure	not sure
2	non-agree	agree
1	very non-agree	very agree

The mean score in each item was ranged between 1-5.

Section III Child aggression

Base on the questionnaire of Petsuksiri, P. (1996: 32, 69-70) who modified it from MMPI (Minnesota Multiphasic Personality Inventory) and 16 PE (Sixteen Personality Factors), the questionnaire partly were modified. Including, researcher had developed this questionnaire partly from the literature reviews. There were 12 items regarding child aggressive behavior within one year. Each item was rated on four scales and only one choice could be selected. The categories were scored as: none = 0, rarely = 1, sometimes = 2, and regularly = 3. The mean score in each item was ranged between 0-3.

Section IV Child substance use and alcohol consumption

There were 13 items consisted of: child substance use within one year (10 items) and child alcohol consumption within one year (3 items). This questionnaire were divided into four categories: none, rarely (once in 3-6 months), sometimes (once in every month), and regularly (once in every week). Each item could be selected one choice.

Validity and Reliability of Instruments

1. The content validity of the questionnaire used for data collection in this study was examined by five experts and the thesis advisory committees. After the experts and the thesis advisory committees had commented and suggested, the researcher revised and tried out the questionnaire prior to the actual data collection.

2. The questionnaires were tried out with 45 7th-9th graders in one of Bangkok Metropolis's schools that was not in the actual sample group of this study but had similar characteristics. The instruments were tested for reliability by the Cronbach's alpha coefficient. The reliability results were as follows.

Family relationship	=	0.7855
Family crisis	=	0.5945
Physical abuse	=	0.7007
Emotional abuse	=	0.7918
Neglected abuse	=	0.9056
Child self – esteem	=	0.7449
Child aggression	=	0.7495

Data Collection

1. The researcher met the school directors, asking for permission to collect data. The official letter from the Faculty of Graduate Studies, Mahidol University was submitted by the researcher to the directors of participated schools, requesting for permission and cooperation in the data collection process.

2. The researcher and 3 trained research assistants met the respondents and their teachers to explain the purpose of the study, consented information by the respondents' caregiver for protection of their rights, and the questionnaire information. The information would be confidentially kept and used only for this research.

3. An approximately 30 minutes were used to collect data by explaining on how to answer questions in each item. The researcher checked for completion of the questions from questionnaires after respondents finished their total answers.

Data Analysis

After examining for the completeness of the questionnaires, the data was encoded and processed for statistical analysis by using the computer software program. In this study, the data analytical procedures were performed as follows.

1. Descriptive statistics

Socio-demographic characteristics of the study subjects were described by using frequencies, percentages, means, and standard deviations.

2. Analytical statistics used in the comparisons of the family caregiver, family, and child factors were analyzed by using *t* – test and One – way ANOVA.

3. Analytical statistics used to examine the correlations of child abuse, and the family caregiver and family factors. The data was analyzed by using the Pearson's Product Moment Correlation Coefficient.

Statistical procedures were performed by using the significant level of 0.05.

CHAPTER IV

RESULTS

The purpose of this descriptive research was to determine the prevalence of child abuse and to examine the differences and correlations between the family caregiver, family, and child factors and child abuse. And determined the prevalences of health consequences in children who were abused including, physical health consequence: injury/physical complaints; psychological health consequences: emotional complaints and self-esteem; and behavioral health consequences: aggression and substance use/alcohol consumption. The subjects in this research were 7th-9th graders in Bangkok Metropolis. Data were collected using the questionnaires during 14th to 28th September 2002.

The total subject of 350 students were aged 11 to 17 years old who attended 3 governmental schools in Bang-Sue district, Bangkok Metropolis. They were 127 of 7th graders, 121 of 8th graders, and 102 of 9th graders. The data were analyzed using frequencies, percentages, means, standard deviations, t-test, One-way ANOVA and Pearson's Product Moment Correlation Coefficient. The results were presented as follows:

1. Child characteristics
2. Family caregiver characteristics
3. Family characteristics
4. Characteristics of child abuse
5. Health consequences of abuse in children
6. Comparison of child abuse by family caregiver, family, and child factors.
7. Correlation between family caregiver and family factors, and child abuse.

1. Child characteristics

A total of 350 children participated in this study, more than half (54.0 %) of them were girls. Ages of children ranged from 11 to 17 years old, the most largely age group was 13 years old (35.1 %) and the oldest age group (16-17 years old) was the

least frequent (0.6 %). The oldest children group had the largest percentage of children with 48.9 percent, while the middle children group had the lowest percentage with 10.9 percent. The mean grade point average of children was 2.59 and almost one-fourth (25.2 %) of them had low level of grade point average (See Table 1).

Table 1 Frequency and percentage of children classified by their characteristics (n = 350)

Children characteristics	Frequency	Percentage
Gender		
Boy	161	46.0
Girl	189	54.0
Age (years)		
11 – 12	78	22.3
13	123	35.1
14	107	30.6
15	40	11.4
16 – 17	2	0.6
Mean = 13.3 S.D. = 0.99 Min = 11 Max = 17		
Birth order		
The oldest child	171	48.9
The middle child	38	10.9
The youngest child	102	29.1
The single child	39	11.1
Educational level		
7 th grade	127	36.3
8 th grade	121	34.6
9 th grade	102	29.1

Table 1 Frequency and percentage of children classified by their characteristics
(Continued)

Children characteristics	Frequency	Percentage
Grade point average (n = 345)		
Low level (1.00 – 2.00)	87	25.2
Moderate level (2.01 – 3.00)	160	46.4
High level (3.01 – 4.00)	98	28.4
Mean = 2.59 S.D. = 0.73 Min = 1.00 Max = 4.00		

2. Family caregiver characteristics

Data analysis showed that more than half (54.6 %) of all family caregivers were females. According to family caregivers' age, the mean age of them was 41.8 years. The larger age group was family caregivers who aged 40 and older with 58.7 percent. In the same age group comprised of: 42.4 percent were 40-49 years old and 16.3 percent were older than 49 years old. However, 39.2 percent of all family caregivers were 30-39 years old. The family caregiver data by marital status found that mostly of them were married (86.1 %). While the widow/divorced/separated group accounted for almost 11 percent. Of all family caregivers, in term of educational level, nearly 59 percent had primary school education. In term of occupation, more than 40 percent (42.2 %) of family caregivers had manual work including, labour (24.2 %) and sub-merchant (18.0 %), and almost one-fourth (23.9 %) of them had no work including, house wife/house worker (18.3 %) and unemployment (5.6 %). About 8 percent of family caregivers had regular alcohol drinking, while nearly 9 percent (8.6 %) of them used substance including, energizer, amphetamine or other

drugs/substance. The family caregivers with regular playing gamble including, lottery, cards, betting on racing horse or sports etc. accounted for approximately 6 percent of all family caregivers. By far, the largest percentage of family caregivers (86.3 %) were parents including, birth parents and step/adoptive parents (See Table 2).

Table 2 Frequency and percentage of family caregivers classified by their characteristics (n = 674)

Family caregiver characteristics	Frequency	Percentage
Gender		
Male	306	45.4
Female	368	54.6
Age (years) (n = 673)		
Younger than 20 (≤ 19)	1	0.2
20 – 29	13	1.9
30 – 39	264	39.2
40 – 49	285	42.4
Older than 49 (≥ 50)	110	16.3
Mean = 41.8 S.D. = 8.4 Min = 17 Max = 80		
Marital status		
Single	23	3.4
Widow/divorced/separated	71	10.5
Married	580	86.1

Table 2 Frequency and percentage of family caregivers classified by their characteristics (n = 674) (Continued)

Family caregiver characteristics	Frequency	Percentage
Educational level (n = 632)		
Primary school	372	58.9
Secondary school	111	17.5
Bachelor degree and higher	149	23.6
Occupation (n = 661)		
House wife/house worker	121	18.3
Unemployment	37	5.6
Labour/Low skill worker	160	24.2
Sub-merchant	119	18.0
Government officer/State enterprise	113	17.1
Company officer	57	8.6
Business/Private enterprise	54	8.2
Alcohol consumption		
No	373	55.3
Rarely (once in 3-6 months)	152	22.6
Sometimes (once in every month)	93	13.8
Regularly (once in every week)	56	8.3
Substance use (n = 671)		
No	613	91.4
Rarely (once in 3-6 months)	29	4.3
Sometimes (once in every month)	8	1.2
Regularly (once in every week)	21	3.1
Gambling		
No	419	62.2
Rarely (once in 3-6 months)	118	17.5
Sometimes (once in every month)	96	14.2
Regularly (once in every week)	41	6.1

Table 2 Frequency and percentage of family caregivers classified by their characteristics (n = 674) (Continued)

Family caregiver characteristics	Frequency	Percentage
Family caregiver's role		
Father	273	40.5
Mother	293	43.5
Step/adoptive father	9	1.3
Step/adoptive mother	7	1.0
Relative	92	13.7

Note: A total of 674 family caregivers were identified by 350 children; 324 children reported two family caregivers and 26 children reported one family caregiver.

3. Family characteristics

The result revealed that more than half (52.9 %) of children living in extended family. Of all families, additional analyses indicated that the families with no family crisis and with family crisis almost equally, 49.4 percent compared to 50.6 percent (See Table 3).

Table 3 Frequency and percentage of children classified by their family characteristics (n = 350)

Family characteristics	Frequency	Percentage
Family type		
Nuclear family	165	47.1
Extended family	185	52.9
Family crisis		
No family crisis	173	49.4
Have family crisis	177	50.6

The family relationship was assessed by using the questionnaire consisted of 10 items. The mean score in each item was ranged from 1-3. According to 10 items of family relationship, the highest mean score item was none of family members paid attention to the others ($\bar{X} = 2.79$, S.D. = 0.48) and the lowest mean score item was conflicts occurred among family members ($\bar{X} = 2.30$, S.D. = 0.56) (See Table 4).

Table 4 Family relationship within one year classified by mean scores and standard deviations (n = 350).

Family relationship items	\bar{X}	S.D.
1. None of family members paid attention to the others.	2.79	0.48
2. Hurting to other family members was existing event in family.	2.75	0.47
3. Family members were friendly all together.	2.74	0.49
4. I felt warmth when I stay with my family.	2.72	0.54
5. Family members were harmony.	2.71	0.53
6. Meeting was regular behavior among family members.	2.70	0.50
7. Caring of family members was existing all time in family.	2.63	0.54
8. None of family members could share ideas.	2.54	0.61
9. Climate within family was uncomfortable.	2.51	0.62
10. Conflicts occurred among family members.	2.30	0.56

4. Characteristics of child abuse

4.1 Characteristics of child abuse

The data of child abuse were collected by using self-administrating questionnaire from the samples which were divided into three subsections: physical abuse (14 items), emotional abuse (11 items), and neglected abuse (9 items). Result showed that 308 (88.0 %) of the children were abused at least one type/form from all types/forms of child abuse by their family caregivers (See Table 5).

Table 5 Frequency and percentage of children classified by experience of being abused within one year (n = 350)

Experience of being abused	Frequency	Percentage
Abused	308	88.0
Non-abused	42	12.0
Total	350	100.0

According to types of abuse, the highest percentage of abused children was affected on emotional abuse (93.5 %). However, the numbers added all three types of child abuse up to more than 100 percent because some children were abused more than one type (See Table 6).

Table 6 Frequency and percentage of abused children classified by type of abuse within one year (n = 308)

Type of abuse*	Frequency	Percentage
Emotional abuse	288	93.5
Physical abuse	209	67.9
Neglected abuse	173	56.2

* Some children were abused more than one type.

Of all 674 family caregivers were analyzed for abusive experience their children that the children reported. Result presented that four-fifth (80.9 %) of them had abusive experience their children (See Table 7).

Table 7 Frequency and percentage of family caregivers classified by abusive experience their children (n = 674)

Abusive experience of family caregivers	Frequency	Percentage
Abusive	545	80.9
Non-abusive	129	19.1
Total	674*	100.0

* A total of 674 family caregivers were identified by 350 children; 324 children reported two family caregivers and 26 children reported one family caregiver.

4.2 Forms of child abuse

A total of 545 abusive family caregivers were analyzed for frequencies and forms of physical, emotional, and neglected abuse their children. Results are presented as follows.

4.2.1 Forms of physical abuse by family caregivers

The three topmost forms of physical abuse by their family caregivers were spanking with the bare hand/hitting with a fist (47.0 %), hitting with a rod or belt (29.9 %), and throwing objects on (20.0 %). Severe physical abuse including pressing cigarette on skin/burning with iron (0.4 %) and using a weapon/knife (0.4 %) were also found. While, the item of hot water burning on body was only one that family caregivers didn't abuse their children (Table 8).

The frequencies of child physical abuse were divided into 3 levels as follows: regularly (once in every week), sometimes (once in every month), and rarely (once in 3-6 months). The mostly frequency of physical abuses were rarely. However, the three topmost forms of physical abuse reported regularly were spanking with the bare hand/hitting with a fist (2.2 %), throwing objects on (1.5 %), and pinching very hard (1.5 %) (Table 8).

Table 8 Frequency and percentage of abusive family caregivers classified by forms and frequencies of child physical abuse (n = 545).

Forms of physical abuse	Abusive				Never
	Regularly	Sometimes	Rarely	Total	
1. Spanking with the bare hand/hitting with a fist	12 (2.2)	39 (7.2)	205 (37.6)	256 (47.0)	289 (53.0)
2. Hitting with a rod or belt	7 (1.3)	34 (6.2)	122 (22.4)	163 (29.9)	382 (70.1)
3. Throwing objects on	8 (1.5)	23 (4.2)	78 (14.3)	109 (20.0)	436 (80.0)
4. Pinching very hard (obvious lesions/bruises)	8 (1.5)	25 (4.6)	54 (9.9)	87 (16.0)	458 (84.0)
5. Hair – pulling/pulled or twisted ears	3 (0.6)	23 (4.2)	57 (10.5)	83 (15.3)	462 (84.7)
6. Slapped face, head, ears with hand or objects	4 (0.7)	16 (2.9)	48 (8.8)	68 (12.4)	477 (87.6)
7. Pushing/pulling/flinging/ shaking	4 (0.7)	11 (2.0)	46 (8.4)	61 (11.1)	484 (88.9)
8. Kicking/strucking/ punching	1 (0.2)	7 (1.3)	29 (5.3)	37 (6.8)	508 (93.2)
9. Trampling or crushing with foot	2 (0.4)	3 (0.6)	13 (2.4)	18 (3.4)	527 (96.6)
10. Knocking head or body against floors or walls	1 (0.2)	5 (0.9)	6 (1.1)	12 (2.2)	533 (97.8)
11. Restraining by hands or foot very hard (obvious pain)	0 (0.0)	0 (0.0)	3 (0.6)	3 (0.6)	542 (99.4)
12. Pressing cigarette on skin/burning with iron	0 (0.0)	1 (0.2)	1 (0.2)	2 (0.4)	543 (99.6)
13. Using a weapon/knife	0 (0.0)	0 (0.0)	2 (0.4)	2 (0.4)	543 (99.6)

Note: The family caregiver may abuse a child for more than one form.

4.2.2 Forms of emotional abuse by family caregivers

The five topmost forms of child emotional abuse by their family caregivers were scolding to the child with rude language (59.0 %), yelling (54.9 %), didn't allow the child to go out from home for playing with friends (35.0 %), threat/intimidating with verbal or nonverbal (28.8 %), and calling as the animals (24.4 %) (Table 9).

The frequencies of child emotional abuse divided into 3 levels as follows: regularly (once in every week), sometimes (once in every month), and rarely (once in 3-6 months). The mostly frequency of emotional abuses were rarely. Whatever, the emotional abuse regularly occurred were scolding to the child with a rude language (7.3 %), yelling (7.2 %), and didn't allow the child to go out from home for playing with friends (6.4 %) (Table 9).

Table 9 Frequency and percentage of abusive family caregivers classified by forms and frequencies of child emotional abuse (n = 545).

Forms of emotional abuse	Abusive				Never
	Regularly	Sometimes	Rarely	Total	
1. Scolding to the child with rude language	40 (7.3)	76 (13.9)	206 (37.8)	322 (59.0)	223 (41.0)
2. Yelling	39 (7.2)	75 (13.8)	185 (33.9)	299 (54.9)	246 (45.1)
3. Didn't allow the child to go out from home for playing with friends	35 (6.4)	43 (7.9)	113 (20.7)	191 (35.0)	354 (65.0)
4. Threat/intimidating with verbal or nonverbal	23 (4.2)	35 (6.4)	99 (18.2)	157 (28.8)	388 (71.2)
5. Calling as the animals	20 (3.7)	28 (5.1)	85 (15.6)	133 (24.4)	412 (75.6)
6. Ridiculing	19 (3.5)	26 (4.8)	58 (10.6)	103 (18.9)	442 (81.1)

Table 9 Frequency and percentage of abusive family caregivers classified by forms and frequencies of child emotional abuse (n = 545) (Continued).

Forms of emotional abuse	Abusive			Total	Never
	Regularly	Sometimes	Rarely		
7. Blaming that they were a bad child	14 (2.6)	29 (5.3)	47 (8.6)	90 (16.5)	455 (83.5)
8. Punishing without a reason	22 (4.0)	16 (2.9)	47 (8.6)	85 (15.5)	460 (84.5)
9. Told or acted for belief the child that it was offensive: didn't let a child to stay close	14 (2.6)	12 (2.2)	29 (5.3)	55 (10.1)	490 (89.9)
10. Insulting	5 (0.9)	18 (3.3)	20 (3.7)	43 (7.9)	502 (92.1)
11. Isolation/restricting a child's movements/locked the child to didn't out of the household	3 (0.6)	4 (0.7)	8 (1.5)	15 (2.8)	530 (97.2)

Note: The family caregiver may abuse a child for more than one form.

4.2.3 Forms of neglected abuse by family caregivers

The three topmost forms of child neglected abuse by their family caregivers were inattention to provide necessary food for a child, or lack of appropriate supervision (21.7 %), letting a child stay home without adult for longer than a day (21.5 %), and providing a child with improper educational materials (19.6 %) (Table 10).

The frequencies of child neglected abuse divided into 3 levels as follows: regularly (once in every week), sometimes (once in every month), and rarely (once in 3-6 months). The mostly frequency in almost all of neglected abuses were rarely. However, the three topmost forms of neglected abuse reported regularly were

inattention to educate a child (4.8 %), letting a child stay home without adult for longer than a day (4.6 %), providing a child with improper educational materials (4.0 %) and non-provide necessary medical treatment (4.0 %) (Table 10).

Table 10 Frequency and percentage of abusive family caregivers classified by forms and frequencies of child neglected abuse (n = 545).

Forms of neglected abuse	Abusive			Total	Never
	Regularly	Sometimes	Rarely		
1. Inattention to provide necessary food for a child, or lack of appropriate supervision	21 (3.9)	30 (5.5)	67 (12.3)	118 (21.7)	427 (78.3)
2. Letting a child stay home without adult for longer than a day	25 (4.6)	15 (2.8)	77 (14.1)	117 (21.5)	428 (78.5)
3. Providing a child with improper educational materials	22 (4.0)	16 (2.9)	69 (12.7)	107 (19.6)	438 (80.4)
4. Inattention to provide adequate clothing for a child	21 (3.9)	21 (3.9)	56 (10.3)	98 (18.1)	447 (81.9)
5. Inattention to educate a child	26 (4.8)	24 (4.4)	39 (7.2)	89 (16.4)	456 (83.6)
6. Non-provide necessary medical treatment	22 (4.0)	23 (4.2)	28 (5.1)	73 (13.3)	472 (86.7)
7. Didn't talk or ask to a child for several days	19 (3.5)	15 (2.8)	37 (6.8)	71 (13.1)	474 (86.9)
8. Non – provision of the money	16 (2.9)	9 (1.7)	37 (6.8)	62 (11.4)	483 (88.6)
9. Inattention to protect a child by teaching about dangerous accident	19 (3.5)	19 (3.5)	15 (2.8)	53 (9.8)	492 (90.2)

Note: The family caregiver may abuse a child for more than one form.

5. Health consequences of abuse in children

All 308 abused children were analyzed by using frequencies and percentages of physical, psychological, and behavioral health consequences of abuse. Results are presented as follows.

5.1 Physical health consequence of child abuse:injury/physical complaints

The physical health consequence of abuse in children comprised of 19 items of injury/physical complaint. Analysis showed that the three topmost forms of injury/physical complaints were minor injury and no lesion (28.9 %), headache (27.3 %), and abrasion/welt (24.9 %). However, the severe injury/physical complaints including, teeth broken/looseness (1.0 %), burn (0.3 %), bone fracture (0.3 %), asthma (0.3 %), and convulsion (0.3 %) were also found. While, three items of them: scald, loose joint, and internal organ trauma were not the injury/physical complaints that abused children had to be (Table 11).

The frequencies of child physical consequence were divided into 3 levels as follows: rarely (once in 3-6 months), sometimes (once in every month), and regularly (once in every week). The mostly frequency in almost all of items were rarely. Whatever, the injury/physical complaints regularly occurred were headache (3.6 %), abrasion/welt (2.9 %), minor injury and no lesion (1.6 %), and fatigue (1.6 %) respectively (Table 11).

Table 11 Frequency and percentage of abused children classified by forms and frequencies of injury/physical complaints within one year (n = 308).

Forms of injury/physical complaints	Frequency (%)				None
	Rarely	Sometimes	Regularly	Total	
1. Minor injury and no lesion	67 (21.8)	17 (5.5)	5 (1.6)	89 (28.9)	219 (71.1)
2. Headache	58 (18.8)	15 (4.9)	11 (3.6)	84 (27.3)	224 (72.7)
3. Abrasion/welt	58 (18.8)	10 (3.2)	9 (2.9)	77 (24.9)	231 (75.1)

Table 11 Frequency and percentage of abused children classified by forms and frequencies of injury/physical complaints within one year (Continued)
(n = 308).

Forms of injury/physical complaints	Frequency (%)				None
	Rarely	Sometimes	Regularly	Total	
4. Contusion/bruise/swelling	43 (14.0)	15 (4.9)	3 (1.0)	61 (19.9)	247 (80.1)
5. Abdominal spasm	19 (6.2)	2 (0.6)	3 (1.0)	24 (7.8)	284 (92.2)
6. Lacerated/bleeding wound	16 (5.2)	5 (1.6)	1 (0.3)	22 (7.1)	286 (92.9)
7. Nausea/vomiting	16 (5.2)	2 (0.6)	1 (0.3)	19 (6.1)	289 (93.9)
8. Fatigue	11 (3.6)	2 (0.6)	5 (1.6)	18 (5.8)	290 (94.2)
9. Heart burn	5 (1.6)	2 (0.6)	2 (0.6)	9 (2.8)	299 (97.2)
10. Dislocated joint	4 (1.3)	2 (0.6)	0 (0.0)	6 (1.9)	302 (98.1)
11. Teeth broken/looseness	3 (1.0)	0 (0.0)	0 (0.0)	3 (1.0)	305 (99.0)
12. Burn	1 (0.3)	0 (0.0)	0 (0.0)	1 (0.3)	307 (99.7)
13. Bone fracture	1 (0.3)	0 (0.0)	0 (0.0)	1 (0.3)	307 (99.7)
14. Fainting	1 (0.3)	0 (0.0)	0 (0.0)	1 (0.3)	307 (99.7)
15. Asthma	1 (0.3)	0 (0.0)	0 (0.0)	1 (0.3)	307 (99.7)
16. Convulsion	0 (0.0)	1 (0.3)	0 (0.0)	1 (0.3)	307 (99.7)

Note: Abused child may report for one or more forms of injury/physical complaints.

5.2 Psychological health consequences of child abuse

The psychological health consequences in abused children were divided into two sections: child's emotional complaints and child self-esteem. The abused children were analyzed for these as follows.

5.2.1 Child's emotional complaints

In this section included 8 items of emotional complaint in the children who were abused by their family caregivers. Data analysis revealed that the emotional complaints in 308 abused children mostly found were sadness (88.0 %), normal life (85.0 %), resentment and wanted to fight back (77.0 %), and depressed (77.0 %), respectively. According to the severe emotional complaints in abused children found that 77.0 percent had resentment and wanted to fight back/depressed, 73.7 percent had emotional releasing with sister/brother or friends, and 72.4 percent had anger/wanted to revenge (Table 12).

Table 12 Frequency and percentage of abused children classified by emotional complaints (n = 308).

Emotional complaints in abused child	Frequency	Percentage
1. Sadness	271	88.0
2. Normal life	262	85.0
3. Resentment and wanted to fight back	237	77.0
4. Depressed	237	77.0
5. Fear/paranoid	231	75.0
6. Wanted to escape from home	228	74.1
7. Emotional releasing with sister/brother or friends	227	73.7
8. Anger/wanted to revenge	223	72.4

Note: Abused child may report for one or more emotional complaints.

5.2.2 Child self-esteem

The abused children' self-esteem was measured by using the self-esteem questionnaire which was consisted of 15 items. The mean score in each item was ranged between 1-5. Of all child self-esteem items, the three lowest mean score items were I was one of students who were popular in class ($\bar{X} = 2.88$, S.D. = 1.01), I felt my friends had more skillful than me ($\bar{X} = 3.19$, S.D. = 1.26), and my friends accepted me as a smart person ($\bar{X} = 3.23$, S.D. = 0.97) (See Table 13).

Table 13 Child self-esteem within one year classified by mean scores and standard deviations (n = 303).

Child self-esteem items	\bar{X}	S.D.
1. I was one of students who were popular in class.	2.88	1.01
2. I felt my friends had more skillful than me.	3.19	1.26
3. My friends accepted me as a smart person.	3.23	0.97
4. I felt a useless person among my friends.	3.32	1.29
5. I always though about borning in the other families.	3.33	1.34
6. I always felt an unwanted person in my group.	3.35	1.22
7. My teachers were appreciative with me.	3.37	0.96
8. I felt low self-esteem when I went to school.	3.51	1.36
9. My friends were trust in me.	3.59	0.99
10. My teachers were inattentive/careless to me	3.63	1.09
11. My friends were pleased with me.	3.74	1.12
12. My parents/guardians believed that I will be success in my life.	3.82	1.12
13. My parents/guardians were proud of me.	3.89	1.04
14. None of family members attended/wanted me.	3.96	1.19
15. I could help my parents/guardians doing something of burden.	4.02	0.94

5.3 Behavioral health consequences of child abuse

The behavioral health consequences in abused children comprised of two sections: child aggression, and child substance use and alcohol consumption. A total of 308 abused children were analyzed for those as follows.

5.3.1 Child aggression

The mean score in each item of child aggression questionnaire ranged between 0-3. A total of 12 items regarding child aggressive behavior, the three highest mean score items were I expressed the same manner to someone who were impolite to me ($\bar{X} = 1.21$, S.D. = 0.94), I expressed angrily to someone who made me unpleasant ($\bar{X} = 0.94$, S.D. = 1.01), and I was a noisy person ($\bar{X} = 0.82$, S.D. = 0.88) (See Table 14).

Table 14 Child aggression within one year classified by mean scores and standard deviations (n = 308).

Child aggression items	\bar{X}	S.D.
1. I expressed the same manner to someone who were impolite to me.	1.21	0.94
2. I expressed angrily to someone who made me unpleasant.	0.94	1.01
3. I was a noisy person.	0.82	0.88
4. I suddenly responded more seriously revenge to someone who attacked me.	0.73	0.88
5. I sneered or cursed to others.	0.64	0.78
6. I used to destroy things when I was very angry.	0.63	0.86
7. I yelled or argued with someone who were in conflict or opposite to me.	0.57	0.85
8. I had start arguing and boxing with others.	0.45	0.69
9. I said sarcastically in order to make others ashamed or sad.	0.42	0.69
10. I did the exciting things such as jumping from ladders, playing with sharp things.	0.38	0.75
11. I used to hurt others by jumping to them.	0.21	0.49
12. I boxed or attacked the others when I wanted something from them.	0.19	0.46

5.3.2 Child substance use and alcohol consumption

In this questionnaire consisted of 13 items of abused child's substance use and alcohol drinking behavior. Data analysis revealed that more than one-third (34.7 %) of 308 abused children had alcohol consumption, and in this group comprised of: 28.0 percent were 7th graders, 31.8 percent were 8th graders, and 40.2 percent were 9th graders. About one-fifth (19.5 %) of 308 abused children had substance use including, 20.0 percent were 7th graders, 38.3 percent were 8th graders, and 41.7 percent were 9th graders. Three topmost kinds of alcohol consumption were wine (28.5 %), beer (19.8 %), and liquor (9.1 %), respectively. Three topmost kinds of substance use were energizer (9.1 %), cigarette (9.1 %), and barbiturates/codeine (3.6 %), respectively. While, the serious substance use of abused children, about 4 percent (3.6 %) was barbiturates/codeine. Amphetamine accounted for 1 percent, and marijuana, thinner, kartom accounted for 0.6, 0.6, and 0.3 percent of abused children respectively. In addition, there were some children that each child used many kinds of substance such as; cigarette and amphetamine: cigarette, amphetamine, and marijuana: cigarette, marijuana, and kartom: cigarette, amphetamine, barbiturates/codeine, thinner, and energizer. By the by, stimulant, opium, and heroin were the three items of substance that abused children didn't use in this report (Table 15).

The frequencies of child's substance use and alcohol drinking behavior were divided into 3 levels as follows: rarely (once in 3-6 months), sometimes (once in every month), and regularly (once in every week). The mostly frequency of substance use and alcohol consumption were rarely. However, the all kinds of them that reported regularly were cigarette and wine with 0.6 percent; energizer, liquor, and beer with 0.3 percent of abused children all together (Table 15).

Table 15 Frequency and percentage of abused children classified by kinds and frequencies of substance use and alcohol drinking within one year (n = 308).

Kinds of substance use And alcohol drinking	Frequency (%)				None
	Rarely	Sometimes	Regularly	Total	
1. Wine	73 (23.7)	13 (4.2)	2 (0.6)	88 (28.5)	220 (71.5)
2. Beer	48 (15.6)	12 (3.9)	1 (0.3)	61 (19.8)	247 (80.2)
3. Liquor	19 (6.2)	8 (2.6)	1 (0.3)	28 (9.1)	280 (90.9)
4. Energizer	20 (6.5)	7 (2.3)	1 (0.3)	28 (9.1)	280 (90.9)
5. Cigarette	20 (6.5)	6 (2.0)	2 (0.6)	28 (9.1)	280 (90.9)
6. Barbiturates/codeine	11 (3.6)	0 (0.0)	0 (0.0)	11 (3.6)	297 (96.4)
7. Amphetamine	3 (1.0)	0 (0.0)	0 (0.0)	3 (1.0)	305 (99.0)
8. Marijuana	2 (0.6)	0 (0.0)	0 (0.0)	2 (0.6)	306 (99.4)
9. Thinner	2 (0.6)	0 (0.0)	0 (0.0)	2 (0.6)	306 (99.4)
10. Kartom	1 (0.3)	0 (0.0)	0 (0.0)	1 (0.3)	307 (99.7)

Note: Abused child may report for one or more kinds of substance use and alcohol drinking.

6. Comparison of child abuse by family caregiver, family, and child factors.

1. Family caregiver factors

1.1 Occupation

The family caregivers with non-manual work had lower mean score of child abuse than family caregivers with other occupation groups. One-way ANOVA was used to analysis showed that there was statistically significant difference of child abuse among family caregivers with different occupation ($F = 16.800$, $p\text{-value} < 0.001$) (See Table 16). Sheffe test for multiple comparisons found that the child abuse was different between the family caregivers with no work group and non-manual work group ($p\text{-value} = 0.001$, mean difference = 9.10), and manual work group and non-manual work group ($p\text{-value} < 0.001$, mean difference = 11.51).

Table 16 Comparison of child abuse by family caregiver' s occupation (n = 661)

Occupation	Number	Mean	S.D.	F	df	p-value
No work	158	14.7 ^a	26.4			
Manual work	279	17.1 ^b	26.9	16.800	658	< 0.001*
Non-manual work	224	5.6 ^{a,b}	11.5			

* Significance at $p\text{-value} < 0.01$

^{a,b} Different pair of child abuse

1.2 Gender

The mean score of child abuse by family caregiver' s gender showed that females abused their children more than males. T-test for difference in mean score of child abuse revealed that the mean score of the females was significant higher than the males ($t = -1.699$, $p\text{-value} = 0.045$) (Table 17).

Table 17 Comparison of child abuse by family caregiver's gender (n = 674)

Gender	Number	Mean	S.D.	t	df	p-value
Male	306	11.1	18.7			
				-1.699	657.68	0.045*
Female	368	14.0	26.2			

* Significance at p-value < 0.05

1.3 Educational level

The family caregivers with primary school education had highest mean score of child abuse than those with other educational level groups. One-way ANOVA revealed that there was statistically significant difference in mean score of child abuse among family caregivers with different educational level (F = 4.306, p-value = 0.014) (Table 18). Sheffe test for multiple comparisons found that there was broaderline to statistically significant difference of child abuse between the family caregivers with primary school and bachelor degree and higher education (p-value = 0.057, mean difference = 5.49).

Table 18 Comparison of child abuse by family caregiver's educational level (n = 632)

Educational level	Number	Mean	S.D.	F	df	p-value
The primary school	372	15.4 ^a	24.8			
The secondary school	111	9.7	18.0	4.306	629	0.014*
The bachelor degree and higher	149	9.9 ^a	24.1			

* Significance at p-value < 0.05

^a Different pair of child abuse

1.4 Marital status

The widow/divorced/separated family caregivers had higher mean score of child abuse than married and single family caregivers. One-way ANOVA testing for difference in mean score of child abuse showed that there was significant difference of child abuse among the single, widow/divorced/separated, and married family caregivers ($F = 9.478$, $p\text{-value} < 0.001$) (Table 19). Sheffe test for multiple comparisons found that the child abuse was significant different between the widow/divorced/separated and single ($p\text{-value} = 0.002$, mean difference = 19.33), and the widow/divorced/separated and married family caregivers ($p\text{-value} = 0.001$, mean difference = 11.21).

Table 19 Comparison of child abuse by family caregiver' s marital status (n = 674)

Marital status	Number	Mean	S.D.	F	df	p-value
Single	23	3.7 ^a	4.9			
Widow/divorced/separated	71	23.0 ^{a,b}	35.8	9.478	671	< 0.001*
Married	580	11.8 ^b	21.2			

* Significance at $p\text{-value} < 0.01$

^{a,b} Different pair of child abuse

1.5 Substance use

The mean score of child abuse by family caregiver' s substance use showed that the family caregivers with using substance abused their children more than those with no substance used. T-test for difference in mean score of child abuse revealed that the mean score of the family caregivers with using substance was no significant higher than those who did not use substance ($t = -0.271$, $p\text{-value} = 0.394$) (Table 20).

Table 20 Comparison of child abuse by family caregiver' s substance use (n = 671)

Substance use	Number	Mean	S.D.	t	df	p-value
No use	613	12.6	23.3			
				-0.271	669	0.394
Use	58	13.5	21.7			

1.6 Alcohol consumption

The family caregivers with alcohol drinking had higher mean score of child abuse than those who did not drink alcohol. Analysis using t-test revealed that the mean score of the family caregivers with alcohol drinking was statistically significant higher than those who did not drink alcohol ($t = -1.904$, $p\text{-value} = 0.029$) (Table 21).

Table 21 Comparison of child abuse by family caregiver' s alcohol consumption (n = 674)

Alcohol consumption	Number	Mean	S.D.	t	df	p-value
No alcohol drinking	618	12.2	22.2			
				-1.904	672	0.029*
Alcohol drinking	56	18.3	31.0			

* Significance at $p\text{-value} < 0.05$

1.7 Gambling

The mean scores of child abuse by family caregivers' gambling showed that the family caregivers with playing gamble had higher mean score of child abuse than those who did not play gamble. Analysis using t-test for difference of child abuse revealed that the mean score of the family caregivers with playing gamble was

significant higher than those who did not play gamble ($t = -1.912$, $p\text{-value} = 0.031$) (Table 22).

Table 22 Comparison of child abuse by family caregiver's gambling (n = 674)

Gambling	Number	Mean	S.D.	t	df	p-value
No	633	12.1	22.6	-1.912	43.14	0.031*
Yes	41	21.1	29.3			

* Significance at $p\text{-value} < 0.05$

2. Family factor

2.1 Family type

The children living in nuclear family had higher mean score of child abuse than those living in extended family. Analysis using t-test indicated that the mean score of child abuse of the children living in nuclear family was no statistically significant higher than those living in extended family ($t = 1.034$, $p\text{-value} = 0.151$) (Table 23).

Table 23 Comparison of child abuse by family type (n = 350)

Family type	Number	Mean	S.D.	t	df	p-value
Nuclear family	165	14.1	22.2	1.034	348	0.151
Extended family	185	11.7	20.0			

3. Child factors

3.1 Gender

The girls had higher mean score of child abuse than the boys. T-test for difference in mean score of child abuse revealed that the mean score of the girls was no significant higher than the boys ($t = -1.401$, $p\text{-value} = 0.081$) (Table 24).

Table 24 Comparison of child abuse by child's gender (n = 350)

Gender	Number	Mean	S.D.	t	df	p-value
Boy	161	11.2	15.1	-1.401	315.32	0.081
Girl	189	14.2	25.0			

3.2 Birth order

The highest mean score of child abuse was found in the middle child. One-way ANOVA was used to determine the difference in mean score of child abuse with different birth order. Analysis revealed that there was difference of child abuse among children with different birth order at the statistically significant level closed to 0.05 ($F = 2.741$, $p\text{-value} = 0.043$) (See Table 25). While, Sheffe test for multiple comparisons found that the child abuse was not significant different between the oldest, the middle, the youngest, and the single child.

Table 25 Comparison of child abuse by child's birth order (n = 350)

Birth order	Number	Mean	S.D.	F	df	p-value
The oldest child	171	15.1	24.6	2.741	346	0.043
The middle child	38	16.9	28.5			
The youngest child	102	9.0	12.1			
The single child	39	8.9	9.2			

3.3 Grade point average

The children with high level of grade point average had lower mean score of child abuse than those with other grade point average groups. One-way ANOVA showed that there was no significant difference in mean score of child abuse by grade point average level ($F = 2.865$, $p\text{-value} = 0.058$) (Table 26).

Table 26 Comparison of child abuse by grade point average (n = 345)

Grade point average	Number	Mean	S.D.	F	df	p-value
Low (1.00-2.00)	87	13.0	15.4			
Moderate (2.01-3.00)	160	15.0	22.7	2.865	342	0.058
High (3.01- 4.00)	98	8.6	22.4			

3.4 Child by relationship to family caregiver

The step/adoptive children had higher mean score of child abuse than the relative-children and the birth children. One – way ANOVA testing for difference in mean score of child abuse revealed that there was no statistically significant difference of child abuse among the birth children, the step/adoptive children, and the relative-children ($F = 0.494$, $p\text{-value} = 0.610$) (Table 27).

Table 27 Comparison of child abuse by child by relationship to family caregiver (n = 674)

Child by relationship to family caregiver	Number	Mean	S.D.	F	df	p-value
The birth child	566	12.3	20.9			
The step/adoptive child	16	15.8	20.6	0.494	671	0.610
The relative-child	92	14.5	34.1			

7. Correlation between family caregiver and family factors, and child abuse (Table 28).

The correlation of Pearson's Product Moment Correlation Coefficient was used to analyze the correlation between child abuse and family caregiver age, family relationship, and family crisis. The results were as follows.

The correlation between family caregiver age and child abuse was not statistically significant ($r = 0.056$, $p\text{-value} = 0.077$).

The negative correlation between family relationship and child abuse was statistically significant ($r = -0.495$, $p\text{-value} < 0.001$). A negative correlation indicated that children living in family with less family relationship tended to be abused by their family caregivers.

The positive correlation between family crisis and child abuse was statistically significant ($r = 0.186$, $p\text{-value} < 0.001$). A positive correlation indicated that children living in family with family crisis tended to be abused by their family caregivers.

Table 28 Correlation coefficient (r) between family caregiver age, family relationship and family crisis, and child abuse

Variables	Correlation coefficient (r)	p-value
Family caregiver factor		
1. Age (n = 673)	0.056	0.077
Family factors		
1. Family relationship (n = 350)	-0.495	< 0.001
2. Family crisis (n = 350)	0.186	< 0.001

Summary of the factors associated with child abuse

Factors associated with child abuse are summarized in Table 29.

By using t – test and One - way ANOVA revealed that child abuse has significant difference by occupation, family caregiver gender, educational level, marital status, family caregiver alcohol consumption, and family caregiver gambling.

By using Pearson’s Product Moment Correlation Coefficient showed that factors significantly associated with child abuse were family relationship and family crisis.

Table 29 Summary of the factors associated with child abuse

Factors	Statistics	p-value	Hypothesis testing
1. Family caregiver factors			
1.1 Age	Correlation	0.077	Rejected
1.2 Occupation	One-way ANOVA	< 0.001	Accepted
1.3 Gender	t-test	0.045	Accepted
1.4 Educational level	One-way ANOVA	0.014	Accepted
1.5 Marital status	One-way ANOVA	< 0.001	Accepted
1.6 Substance use	t-test	0.394	Rejected
1.7 Alcohol consumption	t-test	0.029	Accepted
1.8 Gambling	t-test	0.031	Accepted
2. Family factors			
2.1 Family type	t-test	0.151	Rejected
2.2 Family relationship	Correlation	< 0.001	Accepted
2.3 Family crisis	Correlation	< 0.001	Accepted
3. Child factors			
3.1 Gender	t-test	0.081	Rejected
3.2 Birth order	One-way ANOVA	0.043	Rejected
3.3 Grade point average	One-way ANOVA	0.058	Rejected
3.4 Child by relationship to family caregiver	One-way ANOVA	0.610	Rejected

CHAPTER V

DISCUSSION

In this study, selected family caregiver, family, and child factors were related to child abuse by family caregivers among the 7th – 9th graders, attending the governmental schools in Bangkok Metropolis. The results are discussed based on the specific objectives of this study.

Objective 1 To determine the prevalence of child abuse by their family caregivers.

The analysis revealed that 88.0 percent of children were abused by their family caregivers (Table 5) and 93.5 percent of abused children were emotional abused (Table 6). Finding on the high prevalence of child abuse was supported with previous studies by Nitirat, P. (1997: 131) who found that 81.8 percent of students in Bangkok Metropolis were abused by their guardians, Auewattana, P. (1999: 142) found that 95.3 percent of the students in Amnacharoen province were treated violently by their parents, Krongyuth, K. (2001: 109) who found that 90.8 percent of students in Bangkok were abused by their guardians, and Kongkaew, D. (2001: 79) also found that 87.1 percent of children in Bangkok were abused by their guardians. The plausible explanation for the high prevalence of child abuse from the studies in Thailand was the method of child abuse report. However, low prevalence of child abuse in western culture was observed which may be due to the expectation of Children' Rights and the increased publicity about child abuse. Whereas in Thai culture, parental considered physical punishment as appropriate and normal discipline. It can be explained by Gelles and Straus (1988, cited in Maurer, 2000: 576) contend that people abuse family members because there are few or no repercussions. There is little risk of arrest or criminal prosecution. Social attitudes, the private nature of family violence, and the structural inequalities in family relationships combine to create a climate in which violence is acceptable (Denham, 1995 cited in Maurer, 2000: 576).

Objective 2 To determine forms of abuse by family caregivers that the children reported, including physical, emotional, and neglected abuse.

Analysis showed that mostly frequent form of physical abuse was spanking with the bare hand/hitting with a fist (47.0 %), mostly frequent form of emotional abuse was scolding to the child with rude language (59.0 %), and mostly frequent forms of neglected abuse were inattention to provide necessary food for a child or lack of appropriate supervision (21.7 %), and letting a child stay home without adult for longer than a day (21.5 %) respectively. This finding was consistent with those from the previous studies by Nitirat, P. (1997: 84, 91) who found that the most common physical abuse was hitting with the hand (79.5 %), and the most common emotional abuse was scolding with a rude language (75.8 %), Auewattana, P. (1999: 143) found that the most common physical violence was whipping by a rod or a belt, and the most common emotional violence was obscene utterance, Krongyuth, K. (2001: 110) found that students were hitting by a rod or a belt, and yelling 48.6, 66.5 percent respectively. And, Kongkaew, D. (2001: 81-85) found that the topmost physical abuse was pulled or twisted ears (34.4 %), the topmost emotional abuse was talking to the children with rude or offensive language (37.5 %), and the topmost neglected abuse was forcing the children to wash their clothes by themselves (34.4 %). This results compared with the findings by World Studies of Abuse in the Family Environment: WorldSAFE project which a cross-national collaborative study. The results came from population-based samples of mothers in the five countries involved in this study: Chile, Egypt, India, Philippines, and USA, on the relative incidence of self-reported parental discipline behaviours. The study presented findings by measured rates of incidence (%) in forms of physical, verbal or psychological punishment, and non-violent disciplinary practices in the previous 6 months as reported by mothers (at least once during the previous 6 months). The finding found that, in the five countries of the WorldSAFE study, the mostly frequently reported form of physical punishment in 4 countries was spanked buttocks with hand except Egypt, mostly frequent form was shook the child. In term of verbal or psychological punishment the most common frequently reported form was similarly in all five countries as yelled or screamed at the child. Whereas the mostly frequently non-violent disciplinary practice

was explained why the behaviour was wrong, also similarly in all five countries involved in this study (Ranyan, et al., 2002: 62-66). As a result, in the different climate/cultural countries were more likely to have similar or nearly characteristic forms of child abuse. Although, in western countries focused on neglect. More than one-half (53.3 %) of all perpetrators were found to have neglected children (Children's Bureau, 2004). Most of child victims (more than 60 percent) experienced neglect (National Clearinghouse on Child Abuse and Neglect Information, 2004). It was difficult to quantify about frequently reported forms of child neglected abuse.

Objective 3 To determine the prevalence of physical, psychological, and behavioral health consequences in children who were abused.

Analysis revealed that, physical health consequences in abused children: injury/physical complaints found that the three popular forms were minor injury and no lesion (28.9 %), headache (27.3 %), and abrasion/welt (24.9 %). As the severe physical complaints including, asthma (0.3 %) and convulsion (0.3 %) were also found, it was indicated that the abused children might misunderstand or mistake recall in these items of questionnaire. In psychological health consequences: emotional complaints in abused child, the three topmost emotional complaints were sadness (88.0 %), normal life (85.0 %), resentment and wanted to fight back/depressed (77.0 %). In term of child self-esteem found that of all child self-esteem items, the lowest mean score item was I was one of students who were popular in class ($\bar{X} = 2.88$, S.D. = 1.01). In behavioral health consequences: child aggression, the highest mean score item of child aggression was I expressed the same manner to someone who were impolite to me ($\bar{X} = 1.21$, S.D. = 0.94), and according to child substance use and alcohol consumption found that 34.7 percent of abused children had alcohol consumption and mostly of them were 9th graders (40.2 %). While about one-fifth (19.5 %) of abused children had substance use, mostly of them were also 9th graders (41.7 %). The topmost kind of alcohol consumption was wine (28.5 %) and the topmost kinds of substance use were energizer (9.1 %) /cigarette (9.1 %). In addition, the serious substance use were barbiturates/codeine (3.6 %), amphetamine (1.0 %), and marijuana/thinner (0.6 %).

This finding agreed with results of the studies by Auewattana, P. (1999: 143) who found that the mostly physical health consequences in abused children were minor injury and no lesion (94.2 %), and bruises which were easily noticed (25.2 %), the most common psychological consequence was sadness (74.0 %), and Krongyuth, K. (2001: 80-84) found that the most common physical health consequence was minor abuse and no lesion (62.7 %), and the mostly psychological consequences were crying (62.2 %) and sadness (60.8 %). Including, Kongkaew, D. (2001: 87-90) found that 23.7 percent of abused children had lesions: scars (55.9 %), scratches (22.6 %), and bruises (7.5 %). Almost 70 percent (67.1 %) of abused children had moderate self-esteem and 20.4 percent of them had low self-esteem. In term of child aggression found that 67.6 percent of abused group had aggressive behavior including, mostly of them had low aggression (63.8 %), and 15.1 percent of them had high aggression.

This finding was supported by Tenney-Soeiro and Wilson (2004: 234-36) who revealed that in general, nonaccidental injuries may be manifested as cutaneous injury, skeletal trauma, or head injury. Cutaneous injury is the most common injury due to child abuse. For the long-term effects of child abuse and neglect, behavioral health studies show that victims of violence experience more depression and aggression. In addition, the health consequences are related to experiences of child abuse included physical health consequences such as bruises and welts, burns and scalds, fractures, lacerations and abrasions; psychological health consequences such as depression and anxiety, feelings of shame and guilt, poor self-esteem; behavioral health consequences such as alcohol and drug abuse, hyperactivity, psychosomatic disorders, suicidal behavior and self-harm, and aggression (Ranyan, et al., 2002: 69-70).

It could be explain that physical, behavioral and emotional manifestations of abuse vary between children, depending on the severity of the abuse, the relationship of the perpetrator to the child, the length of time over which the abuse continues and other factors in the child's environment (Ranyan, et al., 2002: 70). Therefore, it was difficult to detect and determine with actual prevalence in health consequences of child abuse. The finding in this study only presented some plausible effects that might occur upon the abused children and indicated to probable signs that could beware/observe of health consequences for supportive treatment in abused children.

Objective 4 To examine the differences of child abuse by the family caregiver, family, and child factors.

1. Mean scores of child abuse were different by the family caregiver, family, and child factors.

Family caregiver factors

Hypothesis 1 The family caregivers with non-manual work had lower mean score of child abuse than those with manual work and, or no work.

There was statistically significant difference of child abuse among family caregivers with different occupation (p -value < 0.001). The analysis found that family caregivers with non-manual work had a significant lower mean score of child abuse than those with manual work and no work (Mean = 5.6, S.D. = 11.5, p -value < 0.001 and p -value = 0.001, respectively). Therefore, this finding supported the hypothesis and agreed with previous study by Nitirat, P. (1997: 142) who found that the guardians with non-manual work had lower mean score of abuse to their children than those with manual work and no work with significantly associate. The finding is supported by Ranyan, et al. (2002: 67-68) which proposed that physically abusive parents are more likely to be unemployed than their non-abusing counterparts. Including, similarly the study of Tenney-Soeiro and Wilson (2004: 233) which stated that the studies on the topic have shown that the association between domestic violence and child maltreatment is related to lower occupational status. One plausible explanation for the increased risk for people is that the additional stress associated with working in low skills jobs when coping with poverty and child care issues puts people at a higher risk of family violence (Rodriguez, Lasch, Chandra, and Lee, 2001: 177). So, it could be described that the non-manual workers are more likely to get enough income/economic support to meet the family's needs. As the manual workers/no work are more likely to get little economic relief for family necessities and are at risk of experiencing poverty. Poverty is the factor strongly associated with violence. Poverty increases stress to families by heightening concern about the ability to provide the necessities of life for self and family members (Maurer, 2000: 574) with the high level of stress that hard to handle, the family caregivers with manual work/no work are more likely to release frustration by abuse their children.

Hypothesis 2 Females had higher mean score of child abuse than males.

The analysis found that the mean score of child abuse reported by females was significant higher than those of males (p -value = 0.045), supporting the hypothesis. Similarly by the results of previous studies, Auewattana, P. (1999: 92) found that the violators of the children were mothers (54.5 %) more than fathers (45.5 %), Children's Bureau (2004) found that, for 2002 women comprised a larger percentage of all perpetrators than men, 58.3 percent compared to 41.7 percent. Contrary to the study of Krongyuth, K. (2001: 100) which found that there was no significant difference of child abuse in both guardian genders. It could be explained that statistically women tend to abuse more frequently than men, perhaps because they are more often the primary child-care providers (Gelles, 1993: 22-37). Consequently, females might have more occasion to abuse children than males.

Hypothesis 3 The family caregivers with primary school education had higher mean score of child abuse than those who had secondary school and, or bachelor degree and higher education.

This study found that there was statistically significant difference in mean score of child abuse among family caregivers with different educational level (p -value = 0.014). Mean score of child abuse by the family caregivers with primary school education had broaderline to significant higher than those with bachelor degree and higher education (p -value = 0.057, mean difference = 5.49). Therefore, this finding supported the hypothesis and agreed with the study by Nitirat, P. (1997: 143) who found that educational level of guardian had a significantly negative correlation with child abuse. As Krongyuth, K. (2001: 88) who found that the guardians with primary school education had higher mean score of abuse their children than those who had bachelor degree and higher education with significantly associate. The finding was also supported by Ranyan, et al. (2002: 67-68) which revealed that physically abusive parents are more likely to have less education than their non-abusing counterparts. As National Clearinghouse on Child Abuse and Neglect Information (2003) stated that studies have addressed factors that increase one's likelihood of becoming a perpetrator of child maltreatment, and they report that adults in their mid-20s who have not completed high school and live at or below the poverty level are at greater

risk. It could be explained that the family caregivers with higher education had more occasion to learn for understand about child care and development, and also, they reached how to search more knowledge for up date and improve their skills in managing their children's behaviour. Report of the Consultation on Child Abuse Prevention (1999, cited in Ranyan, et al., 2002: 70) stated that it is increasingly considered that providing education and training in area for all parents or prospective parents can be beneficial. In Singapore, for instance, education and training in parenting begins in secondary school, students learn about child care and development, whereas, study contended that abusive parents show greater irritation and annoyance in response to their children's moods and behavior, that they are less supportive, affectionate, playful and responsive to their children, and that they are more controlling and hostile (Ranyan, et al., 2002: 67). For this reason, family caregivers more likely to abuse their children tend to have less education.

Hypothesis 4 The widow/divorced/separated family caregivers had higher mean score of child abuse than those single and,or married.

There was statistically significant difference of child abuse among family caregivers with different marital status (p -value < 0.001). Mean score of child abuse among the widow/divorced/separated family caregivers was significant higher than married and single family caregivers (Mean = 23.0, S.D.= 35.8, p -value = 0.001 and p -value = 0.002, respectively). The finding supported the hypothesis. This finding agree with previous study by Krongyuth, K. (2001: 87-88) who found that the divorced/separated guardians had higher mean score of abuse to their children than the marriage guardians with significantly associate. Including, this finding was supported by Ranyan, et al. (2002: 67-68) which proposed that, in a case-control study in Buenos Aires, Argentina, for instance, children living in single-parent families were at significantly greater risk for abuse than those in two-parent families. For the reason of Maurer (2000: 575), single-parent households are at greater risk of experiencing multiple stressors and poverty. In the United States, 40.6% of all female-headed households with children live at or below the poverty level (U.S. Bureau of the Census, 1996). These families get little economic relief in child support from the fathers. Other stressors include difficulty with supervision of children, little or no

relief from parenting responsibilities, poor housing and related problems. It could be explained that the multiple stressors and poverty of widow/divorced/separated family caregivers which hard to handle, might link them to abuse their children.

Hypothesis 5 The family caregivers with using substance had higher mean score of child abuse than those with no substance used.

The analysis showed that the family caregivers with using substance had higher mean score of child abuse than those with no substance used (Mean = 13.5, S.D. = 21.7). There was no significant difference between substance use and child abuse (p -value = 0.394). Therefore, this finding did not support the hypothesis. Similarly the study of Krongyuth, K. (2001: 102) which found that there was no significant difference between substance use and child abuse. However, this result was inconsistent with Browne and Herbert (1997, cited in Maurer, 2000: 574) who revealed that studies indicate that excessive use of drugs and alcohol is positively correlated with the incidence of violent behavior both inside and outside the family. The finding did not support the report by National Clearinghouse on Child Abuse and Neglect Information: risk and protective factors for child abuse and neglect (2004) which presented about one of important characteristics of the family is linked with child maltreatment. Families in which there is substance abuse are more likely to experience abuse or are at a higher risk of abuse. The rejected hypothesis could be explained that, in term of using substance in this study referred to at least rarely use and included energizer to be a substance, of all family caregivers with using substance (8.6 %), one-half of them found to use in rarely frequency (4.3 %). The plausible explanation was that the family caregivers with no substance addiction and using in the not quite serious kinds of substance, and the family caregivers with no substance used were more likely to abuse their children not different.

Hypothesis 6 The family caregivers with alcohol drinking behavior had higher mean score of child abuse than those who did not drink alcohol.

The mean score of family caregivers with alcohol drinking behavior was statistically significant higher than those who did not drink alcohol (p -value = 0.029). Therefore, this finding supported the hypothesis and was supported by Krongyuth, K.

(2001: 101) who found that guardian with drinking behavior was a significant higher in mean score of child abuse than guardian without drinking behavior. Similarly the study of Sebre, et al. (2004: 113-27) reported that in the study used 1,145 children ages 10-14 from four countries. Result showed that in all four countries, parental overuse of alcohol was associated with emotional and, or physical abuse. According to Allen (2000: 608-9), in the stage alcohol and other drugs are used regularly. The abuse of alcohol and other drugs during this stage is to manipulate varying emotions and is evident in behavioral indicators such as decline in work performance, mood swings, personality changes, lying and conning, conflicts with family members. In this study, alcohol drinking behavior referred to drink alcohol on regular basis. Consequently, family caregivers with drinking behavior might affect abuse to their children by the cause of effects from alcohol.

Hypothesis 7 The family caregivers with playing gamble had higher mean score of child abuse than those who did not play gamble.

This study found that the family caregivers with playing gamble was significant higher in mean score of child abuse than those who did not play gamble (p-value = 0.031). This finding supported the hypothesis and result of previous study by Petsuksiri, P. (1996: 73) who found that gambling was significantly associated with family violence. Contrary to the study by Krongyuth, K. (2001: 102) which found that guardian gambling was no significantly associated with child abuse. In this study, playing gamble referred to play gamble on regular basis. Therefore, gambling addictions could be cause debt and also will not have a time for work and for a family. It could heighten the level of stress and conflict with family members. As a result, the family caregivers with gambling addictions were more likely to abuse their children.

Family factor

Hypothesis 1 Children living in nuclear family had higher mean score of abuse than those living in extended family.

Although, children living in nuclear family had higher mean score of child abuse than those living in extended family (Mean = 14.1, S.D.= 22.2). The result of study found that there was no significant difference of child abuse between children living

in nuclear and extended family (p -value = 0.151). This finding did not support the hypothesis. The finding agreed with some previous studies by Auewattana, P. (1999: 146) and Krongyuth, K. (2001: 103) who found that there was no significant difference between family type and child abuse. Whatever, result of this study was not supported by Nitirat, P. (1997: 146) who found that children living in nuclear family had higher mean score of child abuse than those living in extended family with significantly associate. Including, Maurer (2000: 576) proposed that the structure of modern family living arrangements also works to ensure the privacy of family violence. Since the late 1800s family size has decreased, and multigenerational family living arrangements have sharply declined. As a result there are fewer family members to assert social controls and stop family violence. Whereas, Jecker (1993: 776-80) described that there is a reluctance to breach family privacy. Neighbors, other family members, and authority figures are often unwilling to intervene because family issues are considered private matters. It could be explained that presently, the family members of extended families are decreasing and have less family activities/relationship. As a result, there are fewer family members to stop family violence and they are unwilling to intervene the private matters of families. Consequently, children living in nuclear and extended families were not different in term of child abuse.

Child factors

Hypothesis 1 Girls had higher mean score of abuse than boys.

The girls had higher mean score of child abuse than the boys (Mean = 14.2, S.D.= 25.0). However, result showed that there was no significant difference of child abuse in both child genders (p -value = 0.081). Therefore, this finding did not support the hypothesis. Contrary to the study by Krongyuth, K. (2001: 99) which found that the mean score of child abuse among boys was significant higher than girls, whereas National Clearinghouse on Child Abuse and Neglect Information (2004) reported that, for 2002 girls were slightly more likely to be victims than boys. Similarly the studies of Nitirat, P. (1997: 148-49) and Auewattana, P. (1999: 145) which found that child's gender was not significantly associated with child abuse. The wide cultural gaps that exist between different societies with respect to the role of women and the values

attached to male and female children could account for many of these differences. In some countries, girls are either not allowed to receive schooling or else are kept at home to help look after their siblings or to assist the family economically by working. While, male children appear to be at greater risk of harsh physical punishment in many countries. It may be that such punishment is seen as a preparation for adult roles and responsibilities (Ranyan, et al., 2002: 66). It could be explained that the Thai culture today accepted and respected the role of women more than in the past. Boys and girls had equal values attachment and were treated by parents/social not difference. Consequently, the boys and the girls are more likely to be abused by their family caregivers with not different.

Hypothesis 2 The middle children had higher mean score of abuse than the oldest, the youngest and, or the single children.

The highest mean score of child abuse was found in the middle child (Mean = 16.9, S.D. = 28.5). Analysis revealed that the different birth order differed for mean score of child abuse at the significant level closed to 0.05 (p-value = 0.043). While, multiple comparisons by Sheffe test found that the child abuse was not significant different between the oldest, the middle, the youngest, and the single child. The finding did not support hypothesis. This result was similar with Auewattana, P. (1999: 146) and Krongyuth, K. (2001: 99) which found that there was no significant difference between birth order and child abuse. It could be explained by the study of Rojjanapraphaphun, N. (1998: 89, 106) who stated that almost of guardians are caring their children by democracy rearing pattern. Therefore, the children in the family were abused not different by their guardians. As a result, there was no difference of child abuse among children with different birth order.

Hypothesis 3 The children with low grade point average had higher mean score of abuse than those with moderate and, or high grade point average.

The result showed that there was no statistically significant difference between grade point average level and child abuse (p-value = 0.058). This finding did not support the hypothesis and result of study by Auewattana, P. (1999: 146) who found that grade point average showed a significantly negative correlation to violent acts by

fathers. For explaining to special characteristics of child who risks to abuse, Ranyan, et al. (2002: 66) stated that it is believed that low birth weight, prematurity, illness, or physical or mental handicaps in the infant or child interfere with attachment and bonding and may make the child more vulnerable to abuse. However, these characteristics do not appear to be major risk factors for abuse when other factors are considered, such as parental and societal variables. Whereas, the grade point average of children did not point to be quite major risk special characteristic of child that might make the child more vulnerable to abuse. Some of family caregivers might accept and were not serious about that. As a result, there was no significant difference of child abuse in children with different grade point average.

Hypothesis 4 The step/adoptive children had higher mean score of abuse than the birth children and, or the relative-children.

The analysis found that, although the highest mean score of child abuse was found in the step/adoptive children (Mean = 15.8, S.D.= 20.6). There was no significant difference of child abuse among the birth children, the step/adoptive children, and the relative-children (p-value = 0.610). This finding did not support the hypothesis and did not agree with study by Nitirat, P. (1997: 149) who found that the step/adoptive children had higher mean score of abuse by their guardians than the birth children and the relative/resident children with significantly associate. The plausible explanation for this result was the change of family life in Thai society. Thai society in present accepted divorce and re-marriage more than in the past. The families with stepfather, stepmother, or stepchildren were treated by social not different to families with birth parents and children. They were not offensive from friends or neighbors, and they could continue the family life with warmth/love together. Consequently, the children with different relationship to family caregivers are more likely to be abused by their family caregivers with not different.

Objective 5 To examine the correlations between the family caregiver and family factors, and child abuse.

2. There were correlations between the family caregiver and family factors, and child abuse.

Family caregiver factor

Hypothesis 1 Family caregiver age had a negative correlation with child abuse.

The result indicated that family caregiver age had not statistically significant correlation with child abuse ($r = 0.056$, $p\text{-value} = 0.077$). This finding was supported by Nitirat, P. (1997: 141) and Krongyuth, K. (2001: 105) who found that there was no relationship between child abuse and guardian age. The finding did not support hypothesis, it was inconsistent with American Association for Protecting Children [AAPC], 1990; Children's Defense Fund, 1995 (cited in Maurer, 2000: 577) who stated that statistics of reported cases show individuals who are young are more frequent abusers. As Children's Bureau (2004) presented about age of child maltreated perpetrators for 2002. It was summarized that the perpetrators whose aged younger than 30 years and 30-39 years old had largest percentages of child maltreatment with 37.5 and 39.5 percent, respectively. In this study the mean age overall of family caregivers was 42 years and most of the family caregivers were found in 40 years old and older (40-80 years old) with almost 60 percent (58.7 %). Consequently, they seem to be mature for supervision of children and parenting responsibilities.

Family factors

Hypothesis 1 Family relationship had a negative correlation with child abuse.

The result showed that family relationship had a negative statistically significant correlation with child abuse ($r = -0.495$, $p\text{-value} < 0.001$). The finding supported the hypothesis and agreed with the studies of Nitirat, P. (1997: 151); Auewattana, P. (1999: 146), and Krongyuth, K. (2001: 107) which found that family relationship had a significantly negative correlation with child abuse. While, finding of the study by Perez-Albeniz and De Paul (2004: 289-300) supported that high-risk parents for child physical abuse show a deficit both in general empathy and in empathy toward their

family members. It could be explained that the family caregivers with less family relationship seem to be less supportive, affectionate, playful and responsive to their children. As a result, the family caregivers who had less family relationship were more likely to abuse their children.

Hypothesis 2 Family crisis had a positive correlation with child abuse.

The analysis found that the family crisis had a significantly positive correlation with child abuse ($r = 0.186$, $p\text{-value} < 0.001$). This finding supported the hypothesis and results of studies by Nitirat, P. (1997: 151); Auewattana, P. (1999: 147) and Krongyuth, K. (2001: 107) who found that family crisis had a significantly positive correlation with child abuse. While, Ranyan, et al. (2002: 68) described that stress and social isolation of the parent have also been linked to child abuse and neglect. It is believed that stress resulting from job changes, loss of income, health problems or other aspects of the family environment can heighten the level of conflict in the home and the ability of members to cope or find support. Including, Gelles (1993: 22-37) stated that some individuals may cope well with minor incidents but find a series of stressful incidents hard to handle. For example, the higher the level of stress within the family, the greater the risk of child abuse. As, Roberts and Quillian, 1992; Hammond and Yung, 1993; Browne and Herbert, 1997 (cited in Maurer, 2000: 574) proposed that the inability to handle stressful situations or exposure to an increasing number of stressors is associated with violent behavior. Consequently, from this reason, they had difficulty coping with stressful situations or finding support, or exposure to an increasing number of stressors. As a result, they tended to release stress by abuse their children because they were more vulnerable.

In conclusion, the significant factors related to child abuse in this study were occupation, family caregiver gender, educational level, marital status, family caregiver alcohol consumption, family caregiver gambling, family relationship, and family crisis.

CHAPTER VI

CONCLUSION

This descriptive study aimed to determine the prevalence of child abuse by their family caregivers, to identify the factors which related to child abuse, and to determine the prevalence of physical, psychological, and behavioral health consequences in abused children on 7th – 9th graders in Bangkok Metropolis. The participants were 350 students from three governmental schools in Bang-Sue district. The instrument in this study was the self-administrating questionnaire that had modified by the researcher. This questionnaire was divided into 2 parts: part I The Child Abuse was information for all the samples, and part II The Health Consequences of child abuse was information for the samples who were abused by their family caregivers. The part I questionnaire was divided into 4 sections: the section I questionnaire included items about child characteristics, family caregiver characteristics, and family type: the section II questionnaire was regarding the family relationship: the section III questionnaire consisted of items of family crisis: and the section IV questionnaire was forms of child abuse. The part II questionnaire which was for the abused children, it divided into 4 sections: the section I questionnaire included items of injury/physical complaints and emotional complaints in the child who was abused: the section II questionnaire included items of child self-esteem: the section III questionnaire included items of child aggression: and the section IV questionnaire consisted of items about child substance use and alcohol consumption. The data were collected from students by using the self-administrating questionnaire from 14th to 28th September 2002. The data were encoded and processed for statistical analysis by using the computer software program for descriptive statistics (frequencies, percentages, means, and standard deviations) and analytical statistics (t – test, One – way ANOVA, and Pearson’s Product Moment Correlation Coefficient).

Conclusion

1. Child characteristics

The result revealed that more than half (54.0 %) of the samples were girls, and mostly of subjects (48.9 %) were the oldest children. The most of them had moderate level of grade point average with 46.4 percent.

2. Family caregiver characteristics

More than half (54.6 %) of all family caregivers were females. The mean age of subjects was 41.8 years, and mostly of them were married (86.1 %). Nearly 59 percent of the family caregivers had primary school education, and more than 40 percent (42.2 %) of them had manual work including, labour (24.2 %) and sub-merchant (18.0 %). About 8 percent of the subjects had regular alcohol drinking behavior, and family caregivers with using substance accounted for about 9 percent (8.6 %) of all subjects. Approximately 6 percent of family caregivers had regular playing gamble. More than four-fifth (84.0 %) of subjects were birth parents.

3. Family characteristics

More than half (52.9 %) of children living in extended family. The data showed that families with no family crisis and with family crisis almost equally, 49.4 percent compared to 50.6 percent. According to the family relationship that consisted of 10 items, the highest mean score item was none of family members paid attention to the others ($X = 2.79$, $S.D. = 0.48$), and the lowest mean score item was conflicts occurred among family members ($X = 2.30$, $S.D. = 0.56$).

4. Characteristics of child abuse

The data revealed that 88.0 percent of the children were abused by their family caregivers. Of all abused children, there were emotional abuse (93.5 %), physical abuse (67.9 %), and neglected abuse (56.2 %) when some children were abused more than one type.

The three topmost forms of child physical abuse by their family caregivers were spanking with the bare hand/hitting with a fist (47.0 %), hitting with a rod or belt (29.9 %), and throwing objects on (20.0 %). Mostly frequency of physically abused forms were rarely.

The three topmost forms of child emotional abuse by their family caregivers were scolding to the child with rude language (59.0 %), yelling (54.9 %), and didn't allow the child to go out from home for playing with friends (35.0 %). Mostly frequency of emotional abused forms were rarely.

The three topmost forms of child neglected abuse by their family caregivers were inattention to provide necessary food for a child, or lack of appropriate supervision (21.7 %), letting a child stay home without adult for longer than a day (21.5 %), and providing a child with improper educational materials (19.6 %). Responding mostly frequency of neglected abuse, in most forms were reported as rarely occur.

5. Health consequences of abuse in children

Physical health consequences in abused children: the three topmost forms of injury/physical complaints were minor injury and no lesion (28.9 %), headache (27.3 %), and abrasion/welt (24.9 %). Responding mostly frequency of injury/physical complaints, in most forms were reported as rarely occur.

Psychological health consequences: the emotional complaint in 308 abused children mostly found was sadness (88.0 %). In term of child self-esteem, the lowest mean score item was I was one of students who were popular in class ($\bar{X} = 2.88$, S.D. = 1.01).

Behavioral health consequences: the highest mean score item of child aggression was I expressed the same manner to someone who were impolite to me ($\bar{X} = 1.21$, S.D. = 0.94). According to child substance use and alcohol consumption, 34.7 percent of abused children had alcohol consumption, and 19.5 percent of them had substance use. The topmost kind of alcohol consumption was wine (28.5 %), and the topmost kinds of substance use were energizer (9.1 %) and cigarette (9.1 %). Mostly frequency of substance use and alcohol consumption were rarely.

6. The factors related with child abuse

The factors that significantly associated with child abuse were occupation ($F = 16.800$, $p\text{-value} < 0.001$), family caregiver gender ($t = -1.699$, $p\text{-value} = 0.045$), family caregiver educational level ($F = 4.306$, $p\text{-value} = 0.014$), marital status ($F = 9.478$, $p\text{-value} < 0.001$), alcohol consumption ($t = -1.904$, $p\text{-value} = 0.029$), gambling ($t = -1.912$, $p\text{-value} = 0.031$), family relationship ($r = -0.495$, $p\text{-value} < 0.001$), and family crisis ($r = 0.186$, $p\text{-value} < 0.001$).

Research recommendations

The findings in this study supported the significance of child abused problem in Thai society. Recommendations can be formulated from the findings in this study for efforts in prevention and intervention to minimize child abuse in Thai culture. Four levels of intervention are recommended at individual, family, community, and society level.

Individual interventions

1. Community health nurses could use home visiting to identify and observe abused children/children who were at risk to be abused victims in family including, the girls, the middle children, or the step/adoptive children. The nurse could work with other professionals from the health, mental health, social services, teacher to provide treatments that should be directed at safeguarding at-risk children, and ensuring safety, emotional support, advocacy of Children' Rights for child victims. In addition, professionals team and other family members or friends could also support and promote child health, child emotions/self-esteem, and improving aggressive behavior to abused child victims.

2. Primary prevention aimed at reducing risk of child abuse and eliminating the intergenerational transmission of violence by using health teaching and support for family caregivers at risk to be the perpetrators including, family caregivers with manual work/no work, primary school education, use substance, alcohol drinking, playing gamble, the females, and the widow/divorced/separated family caregivers are effective ways that community health nurses can intervene. Home visiting can be an appropriate approach in identifying risk and abusive family caregivers. Conversation and observation can be used to identify intervention for individual of family caregivers. Nurses must be sensitive to subtle signs of abuse or neglect including, consistent tension, anger, or demeaning remarks are cause for concern. The nurse could work with a number of other professionals from mental health or social services that involves in the intervention plan together for helping the family caregivers at risk and the abusive family caregivers to develop coping skills. Coping skill counseling would include conflict resolution, communication skills, and techniques to improve self-control and parenting skills.

Family interventions

1. Community health nurses are in a position to observe family dynamics and interactions more frequently than are other professionals. They are in a key position to identify and intervene in problematic families. Their long-term relationship with families allows them the opportunity to provide ongoing monitoring of at-risk families including, nuclear family, family with family crisis/less family relationship. Consequently, the nurses could involve with intervention for supporting and reducing the families at risk or have the crisis problems by using health teaching about coping skills and finding support with stressful situations in the family, conflict resolution in family members, and the social controls to stop family violence.

2. Family members should participate and join together in family activities for promotion to be the better family relationship.

Community interventions

1. The community health nurse can develop and deliver community education and support programs aimed at reducing child abuse. The nurse can organize parental support groups and parenting classes. These programmes generally educate parents about child growth and development, stress effective parenting skills in their care to families, and help them to improve their skills in managing their children's behaviour. The nurse can use these forums to educate about Children' Rights, child abuse, and the impact of exposure to violence on children (Maurer, 2000: 590-592; Runyan, et al., 2002: 70).

2. The formal and informal leaders in community, teachers in community schools, friends or neighbors should encourage activities and improve awareness to promotive strengthen community that concern about child abused problem and protection of Children' Rights. The community members could be worked towards observing and seeking to child abuse in families and supporting for families at risk or have the child abused problem.

Social interventions

1. The government should provide education and training to better prepare parenting for inclusion in school curricula that students have to begin learning about child care and development.

2. The governmental policy should promote a continuous campaign to raising awareness and concern of child abuse problem among the public and professionals. The government should have more to do with emphatic protection of Children' Rights including using legal/law issues for protection or help child victims, promoting publicity about child abuse, getting awareness and conducting role of a multi-disciplinary professionals from the social services, health, mental health, education, teacher, and the authority figures to act together based on a network/ a better treatment to prevention, seeking, and provide supporting for each child and its family.

3. The media such as television, radio, or hotline telephone should be widely promoted of Children' Rights, values attached to boys and girls, appropriate parent roles, and action against of child abuse. While, the controlling of media violence might be the effective way that should be intervened to reduce and eliminate violence in Thai society.

4. The government should increase funding for programs that supply economic, health, and other support services to low-income at to be risk families or communities.

Recommendation for further research

1. The instrument in this study used self-administrating questionnaires for gathering the data from 7th-9th graders who were the samples. Some questionnaires about family caregiver characteristics were unsuitable because children did not know some behaviours of their family caregivers, for example gambling which was underestimated, compared to those of Thai people in general. Therefore, further study should collect data from the family caregivers directly about their characteristics/behaviours. And in this study, there was a limitation because only quantitative technique was used to collect the data. Therefore, further study should use other means to collect data, such as case series for guiding local action on child

abuse. In case series can reveal similarities between the experiences in different countries and suggest new hypotheses of child abuse for a much better understanding of its occurrence and related factors. (Runyan, et al., 2002: 62).

2. The further study should concern about the completeness of data collection. Data should be checked for completion after respondents finished their answers. And in this study, the children could report for one or two family caregivers. Therefore, further study should focus the children to identify which family caregiver was the mainly caregiver for indicating that which person had more abused the child in family.

3. This research is limited to study child abuse in Bangkok Metropolis. It should be more studied in other provinces in Thailand that the results of studies could be used to resolution and prevention about child abuse problems in Thai society.

4. The other factors, such as social characteristics of family were not studied in this research. More research should conduct research on the other family and community/social factors such as income or debt of family, size/density of family, domestic violence history, and other violent environments in community/society. Moreover, there should be a study undertaking of regression analysis for testing which factors were associated to child abuse.

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